

# Ninyo & Moore

Geotechnical and Environmental Sciences Consultants

**AST/INDUSTRIAL WASTEWATER UNIT  
CLOSURE REPORT AND  
REMEDIAL ACTION PLAN  
BLOOMFIELD II PROPERTY  
FORMER PLEGEL OIL COMPANY LEASE  
12600 FLORENCE AVENUE  
SANTA FE SPRINGS, CALIFORNIA**

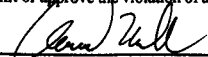
**City of Santa Fe Springs  
Fire Department  
Environmental Protection Division**

**APPROVED FOR THE FOLLOWING PROGRAMS**

- |  |  |
|--|--|
| <input type="checkbox"/> CUPA Programs         | <input type="checkbox"/> Industrial Waste                          |
| <input type="checkbox"/> UFC Article 90        | <input type="checkbox"/> Domestic Waste Only                       |
| <input type="checkbox"/> Approval Not Required | <input checked="" type="checkbox"/> Other <u>Site Mitigation</u> * |

Subject to field inspection and required test, notations hereon, conditions in correspondence and conformance with applicable regulations. The stamping of these plans shall not be held to permit or approve the violation of any regulation of the state.

By



Date

2/22/05

**PREPARED FOR:**

Santa Fe Springs Fire Department  
11300 Greenstone Avenue  
Santa Fe Springs, California 90670

\* The SFP report for the Bloomfield II Property will include copies of Building Dept. permits, disposal documents for contaminated soil, and other documents associated with the RAP.

**PREPARED BY:**

Ninyo & Moore  
Geotechnical and Environmental Sciences Consultants  
475 Goddard, Suite 200  
Irvine, California 92618

February 8, 2005  
Project No. 205372005

February 8, 2005  
Project No. 205372005

Mr. Tom Hall  
Santa Fe Springs Fire Department  
11300 Greenstone Avenue  
Santa Fe Springs, California 90670

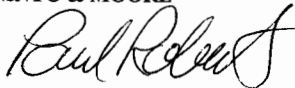
Subject: AST/Industrial Wastewater Unit  
Closure Report and Remedial Action Plan  
Bloomfield II Property  
Former Plegel Oil Company Lease  
12600 Florence Avenue  
Santa Fe Springs, California

Dear Mr. Hall:

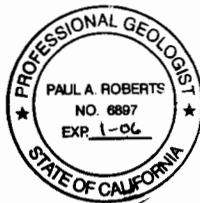
Ninyo & Moore has performed an Aboveground Storage Tank (AST)/Industrial Wastewater Unit Closure Report and Remedial Action Plan for the above-referenced property. The attached report presents our methodology, findings, conclusions, and recommendations regarding the environmental conditions at the site.

If you have any questions regarding this report, please contact the undersigned at your convenience.

Sincerely,  
**NINYO & MOORE**



Paul A. Roberts, P.G., R.E.A. I/II  
Senior Environmental Geologist



PAR/emp

- Distribution: (2) Addressee
- (1) Mr. Peter Rooney, Bloomfield Partners II, LLC
  - (1) Mr. Patrick Russell, Bloomfield Partners II, LLC
  - (1) Pam Andes, Esq., Allen Matkins Leck Gamble & Mallory, LLP

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- Appendix A – Closure Permits
- Appendix B – Non-Hazardous Waste Manifests
- Appendix C – Tank Certificate
- Appendix D – Sampling Procedures
- Appendix E – Laboratory Reports
- Appendix F – Documentation Associated with the Human Health Screening Evaluation

## 1. INTRODUCTION

Bloomfield Partners II, LLC, authorized Ninyo & Moore to perform aboveground storage tank (AST) and Industrial Wastewater Unit closure activities at the former Plegel Oil Company Lease property (referred to as the Plegel lease property or the site) located in the northwestern corner of the Bloomfield II Property in Santa Fe Springs, California (Figures 1 and 2). This report also presents a Remedial Action Plan (RAP) to mitigate the petroleum hydrocarbon and metal impacted soil discovered during these investigations. Work was completed in general accordance with the General Work Plan to Close Aboveground Storage Tanks and Industrial Wastewater Unit dated September 21, 2004, and the Addendum to the General Work Plan dated October 5, 2004. These documents were reviewed and approved by the Santa Fe Springs Fire Department (SFSFD). The Bloomfield II Property and site are currently being redeveloped for commercial purposes.

## 2. BACKGROUND

The site and Bloomfield II Property have been used as oil production from at least 1923 through the time of this report. Oil wells on the Bloomfield II Property have been reabandoned in preparation of the redevelopment of the property. The site was used by Plegel Oil Company for the production and storage of crude oil. Based on groundwater wells located on the Bloomfield II Property, groundwater has been measured at depths of approximately 95 feet below the ground surface (bgs).

The site currently contains an idle oil well (Hathaway Company "Baker" 27) and a decommissioned and abandoned oil well (Hathaway Company "Baker" 5). The site formerly contained three small ASTs (two containing crude oil and one empty), an older oil/water separator, a newer oil/water separator, two wastewater separators, and a clarifier (Figure 3). Crude oil was pumped from "Baker" 27 and piped to the newer oil/water separator, via underground and aboveground piping (Figure 3). The older oil/water separator was recently taken off line and replaced with the newer oil/water separator. Oil from the separator was pumped into the two ASTs for storage. The ASTs were relatively small, holding approximately 250 barrels of crude oil each (or approxi-

mately 10,500 gallons per AST). According to Mr. Wayne Plegel, owner of Plegel Oil Company, the empty AST was never used to store hazardous materials on site. Based on this information, four ASTs (designated T1 through T4 on Figure 3) were closed as part of the investigations described herein. The ASTs that were closed included the two crude oil tanks, the older oil/water separator, and the newer oil/water separator.

The wastewater generated from the pumping process was diverted through a three stage wastewater system that clarified the water before it was discharged to the city storm drain. Most of the piping associated with the wastewater system was discovered to be aboveground (Figure 3). The first stage of the wastewater system was a metal aboveground tank (referred to as the first stage wastewater separator or T6 on Figure 3). The second stage consists of a concrete lined, below-ground "sump" (referred to as the second stage wastewater separator or T5 on Figure 3). During the investigations described herein, this "sump" was discovered to have actually been the cellar for "Baker" 5. The third stage of the wastewater treatment unit was the clarifier located north of the crude oil ASTs (referred to as T7 on Figure 3). Based on this information, the industrial wastewater unit that was closed included the first stage wastewater separator, the second stage wastewater separator, and the clarifier.

As part of the real estate due diligence, in December 2003 and January 2004, Bloomfield Partners II, LLC, retained Ninyo & Moore to conduct a subsurface investigation in the vicinity of the ASTs and wastewater treatment area. As presented on Figure 3, Ninyo & Moore advanced 14 soil borings to depths of up to 65 feet bgs. Laboratory results indicated concentrations of petroleum hydrocarbons and lead that exceeded the Santa Fe Springs Fire Department (SFSFD) Draft Soil Assessment and Remediation Guidelines for Commercial/Industrial Sites, "Draft 64" (referred to herein as the "SFSFD guidelines"). Ninyo & Moore prepared and submitted a report dated February 13, 2004, to the SFSFD documenting these findings. Ninyo & Moore has also prepared a Soil Management Plan (SMP) dated June 17, 2004, that outlines the scope of work to investigate and remediate "unknown environmental features" that might be encountered during grading activities. The SMP was reviewed and approved by the SFSFD on June 29, 2004.

On September 10, 2004, Ninyo & Moore met with Mr. Hall to discuss the proposed scope of work to close the subject ASTs and industrial wastewater unit. Because impacted soil is known to exist, it was agreed upon by Ninyo & Moore and the SFSFD that closure procedures would be completed, including the collection of the confirmation soil samples as described herein, following which, all of the laboratory data would be evaluated and this report/RAP would be prepared.

### 3. OBJECTIVES

The objective of the work described in this report was to close the ASTs and industrial wastewater unit in accordance with current regulatory guidelines. The objective of the RAP is to mitigate the petroleum hydrocarbon and metal impacted soil discovered at the site by excavation.

### 4. AST AND INDUSTRIAL WASTEWATER UNIT REMOVAL

Bloomfield Partners II, LLC, retained Reliable Equipment Rental (Reliable) to clean and remove the ASTs and industrial wastewater unit at the site. Ninyo & Moore completed the confirmation soil sampling under the direction of Mr. Tom Hall of the SFSFD. The sampling was completed by Mr. Paul A. Roberts, a California Registered Geologist from Ninyo & Moore. Soil samples were collected in accordance with Environmental Protection Agency (EPA) Method No. 5035. The soil lithology encountered during this investigation consisted of silty fine sand. The following describes the removal activities.

#### 4.1. AST Removal and Soil Sampling

Prior to commencement of the removal activities, Ninyo & Moore obtained an approved permit from the SFSFD. A copy of the permit is provided in Appendix A. Reliable triple-rinsed the ASTs and industrial wastewater unit using a pressure washer prior to removal. The rinsate, accompanied by a non-hazardous waste manifest, was transported to DeMenno Kerdoon of Compton, California, for recycling (Appendix B). Following removal of the rinsate contents, Reliable retained an Industrial Hygienist from CTL Environmental Services to certify the ASTs as non-hazardous. A copy of the Tank Certification is presented in Appendix C.

← waste water

Reliable removed the ASTs on November 30, 2004. Ninyo & Moore collected soil samples associated with the ASTs and associated piping on November 30, 2004, and December 1, 2004. Soil sampling was completed in accordance with our approved work plan and addendum. Field procedures are presented in Appendix D. Three test pits were excavated beneath both of the larger crude oil ASTs (T1 and T2) and two test pits were excavated in the vicinity of the both of the two aboveground oil/water separators (T3 and T4, Figure 3). Samples P1-1 through P1-6 were collected beneath the underground portion of the crude oil pipeline leading from "Baker" 27 to the oil/water separator (Figure 3). No soil samples were collected beneath the aboveground portions of this piping run.

Soil samples were collected at depths of approximately 2, 5, and 10 feet bgs from each test pit. Petroleum hydrocarbon stained and odorous soil was encountered in test pits excavated along the western portion of the large crude oil ASTs (i.e., test pits T1-1, T1-2, T2-1, and T2-3) and in sample P1-6, collected beneath the associated pipeline (Figure 3). No petroleum hydrocarbon odor or staining was noted in samples collected from test pits excavated on the eastern sides of the ASTs or under the oil/water separators (i.e., test pits T1-3, T2-3, T3-1, T3-2, T4-1, and T4-2). No staining or odors were noted in the remaining samples collected beneath the associated pipeline (i.e., P1-1 through P1-5).

#### **4.2. Industrial Wastewater Unit Removal and Soil Sampling**

The aboveground steel tank associated with the first stage wastewater separator was removed on November 30, 2004, during the removal of the ASTs. During the rinsing and removal of liquids in the second stage wastewater separator, Reliable discovered "Baker" 5. This separator was originally constructed as the cellar for this oil well. "Baker" 5 was reabandoned by others at this time. ← can Bill confirm?

Confirmation soil sampling was completed on January 27, 2005, after the abandonment of "Baker" 5 and the removal of the second stage wastewater separator and clarifier. The second stage wastewater separator extended to a depth of approximately 8 feet bgs, and



confirmation samples were collected at approximately 9 feet bgs (T5-1 and T5-2). Petroleum hydrocarbon stained and odorous soil was noted in both soil samples.

Because the first stage wastewater separator was an aboveground feature, confirmation soil samples were collected at depths of approximately 2 feet bgs (T6-1 and T6-2). A slight petroleum hydrocarbon odor and no staining were noted in sample T6-1, and no staining or odor was noted in sample T6-2.

During removal of the three stage clarifier, the clarifier was noted to be approximately 3.5 feet in depth. In the previously prepared work plan, the depth of the clarifier was misrepresented at a depth of approximately 8 feet bgs. Soil samples collected at approximately 4 feet bgs within the excavation (T7-1 and T7-2) did not show signs of staining or odors. Reliable is planning to cut and cap the effluent pipeline at the on-site sewer manhole (Figure 3). Work will be conducted under the approved permit and oversight of the Santa Fe Springs Building Department. Copies of the signed permit will be forwarded upon receipt.

↗ Include in SMP report

#### 4.3. Laboratory Results

As per the approved work plan, selected soil samples were analyzed by State-certified laboratories for total petroleum hydrocarbons as gasoline  $C_4-C_{12}$  (TPHg), total petroleum hydrocarbons carbon chain  $C_{10}-C_{32}$  (which included total petroleum hydrocarbons as diesel fuel  $C_{13}-C_{22}$  [TPHd] and total petroleum hydrocarbons as oil  $C_{23}-C_{32}$  [TPHo]), volatile organic compounds (VOCs), polynuclear aromatics (PNAs), and Title 22 metals in general accordance with EPA Method Nos. 8015 (modified), 8260B, 8270C, and 6010/7000 series. A summary of the laboratory results are presented on Table 2 and copies of the laboratory reports are provided in Appendix E.

Soil samples collected at depths of approximately 2 feet bgs within each test pit and confirmation samples collected beneath the industrial wastewater unit and pipeline were analyzed for the above described constituents. As presented on Tables 1 and 2 and based on all of the investigations conducted at the site to date, limited areas have been identified that contain

elevated concentrations of petroleum hydrocarbons (either TPHg and/or TPHd), metals (copper and/or lead), and/or naphthalene.

## 5. HUMAN HEALTH SCREENING EVALUATION

Naphthalene is a chemical that is associated with petroleum hydrocarbons, namely crude oil. Naphthalene has recently been classified as a carcinogen by the Federal EPA. Due to this classification, the Preliminary Remediation Goal for residential use (PRGr) value for naphthalene has been reduced from 56 milligrams per kilogram (mg/kg) to 1.7 mg/kg.

Most of the soils that contain elevated concentrations of naphthalene also contain elevated concentrations of petroleum hydrocarbons, and therefore, will be removed from the site as part of the excavation activities. However, some lower concentrations of naphthalene are proposed to be left in place along with the soils that contain low concentrations of petroleum hydrocarbons. To assess whether these lower concentrations of naphthalene can be left in place, Ninyo & Moore completed a Human Health Screening Evaluation (HHSE) based on site conditions and the conservative residential standards.

This section describes the human health screening evaluation and the estimated potential chronic health hazard from post-remedial residual contamination at the site. The objective of this evaluation is to determine if further risk assessment or additional site remediation, land covenants, or other administrative and/or engineering controls are needed to protect future occupants from the remaining concentrations of naphthalene planned to be left on site. The HHSE was completed in general accordance with the Department of Toxic Substances Control (DTSC) Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Interim Final). Documentation associated with the completion of the HHSE is presented in Appendix F. This evaluation consists of five major steps described below.

**Exposure Pathways and Media of Exposure** – This step includes developing a Conceptual Site Model (CSM) to evaluate the potential exposure pathways, the media of exposure, and the receptor populations (see Appendix F). The CSM describes the sources of contamination, the release

mechanism, the transport mechanism, the transport media, the exposure point, the routes of exposure, and the receptor population for possible scenarios of contaminant exposure. The model discriminates complete pathways from incomplete pathways for the various routes of exposure.

**Exposure Concentrations and Chemical of Concern** – This step describes the chemicals of concern (COC) (naphthalene) identified through the site characterization program, evaluates the physical and chemical characteristics of the compound used in the exposure assessment, and provides the rationale for including the COC from the human health screening evaluation process.

**Toxicity Values** – This step assesses the toxicity of the compound and describes the relevant and significant human toxicity data compiled from various sources.

**Risk Characterization Summary** – This step integrates the results of the exposure assessment and the toxicity assessment to quantify the risk and hazard from the COC. The risk and hazard is summed for all complete exposure pathways.

**Uncertainty Analysis** – This step summarizes the basic assumptions and uncertainties of the human health screening evaluation.

#### 5.1. Exposure Pathways and Media of Concern

Based on the Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Interim Final), the human health screening evaluation considered the excess cancer risk (ECR) and non-carcinogenic hazard to an adult for the future site use as a residence. This scenario assumes an exposure duration of 30 years at an exposure frequency of 350 days/year, averaged over 70 years for the cancer risk and averaged over 30 years for the non-cancer hazard. The major route of exposure considered in this HHSE was inhalation of volatile organic compounds (i.e., naphthalene).

According to the conceptual CSM, it is the only complete route

The CSM, presented in Figure F, shows the relationship between the contaminant sources, exposure pathways, and potential receptors for the site. The source-pathway-receptor rela-

tionships provide the basis for the quantitative exposure assessment. Only complete source-pathway-receptor relationships are included in this human health screening evaluation.

Based on the knowledge that depth to groundwater at the site is approximately 95 feet bgs, and that groundwater is not used for municipal use, there is no complete pathway for ingestion or absorption. In addition, and as presented in the SFSFD guidelines, the upper 2 feet of soil at final grade is required to be free of petroleum hydrocarbons based on visual and olfactory evidence. Therefore, ingestion or dermal contact with contaminated soil is not a complete pathway. Based on this information, the complete or potentially complete exposure pathway is the inhalation of VOCs migrating from soil to receptors inside a building (i.e., indoor air).

## 5.2. Exposure Concentrations and Chemical of Concern

Based on site characterization data, the COC was identified as naphthalene. The highest concentrations of naphthalene in soil that will not be excavated during the site remediation were used to estimate the exposure point concentrations (EPC). To obtain the worst case scenario, the site characterization data used to assess exposure from inhalation of naphthalene vapors considered the impacted soils being located at a depth of approximately 2 feet bgs, below the "clean" soil that is required by the SFSFD.

The data used during this evaluation is summarized below.

*conservative assumptions*

Sample	Concentration (mg/kg)	Depth
POL2-25	3	25
T1-1	9.3	2
T5-1	17	9

The subsections below briefly describe the methodology used to estimate the ECR and hazard quotient (HQ, which is a measure of the non-cancer hazard to the organism) for inhalation of naphthalene vapors inside a building.

The DTSC modified Johnson & Ettinger 2003 model (SG\_SCREEN) was used to calculate the ECR and HQ from inhalation of naphthalene in indoor air. The input parameters included the Chemical Abstracts Service (CAS) number, the calculated soil gas concentration at the source, the depth of the source, and the average soil temperature. All other parameters were set to default for a slab-on-grade structure. The default value for the average vapor flow rate into the building of 5 liters/minute was used in the model. For source concentrations in soil, the soil gas concentration in equilibrium in a three phase system was calculated using Equation 1 on page 6 of the User's Guide for Evaluation of Subsurface Vapor Intrusion into Buildings (EPA, 2003). For each sample concentration, SG\_SCREEN was run to calculate the ECR and the HQ. The results of the SG\_SCREEN runs are presented in Appendix F.

### 5.3. Risk Characterization Summary

The cumulative ECR and HQ for each sample concentration were calculated and are summarized in the Tables presented in Appendix F. The results are compared to the acceptable risk for the specified future site use (1E-06 for ECR and 1 for HQ) and are discussed below.

The highest indoor air inhalation risk was quantified as 1.8E-07 (ECR) and 4.2E-03 (HQ). The ECR is comparable to the acceptable risk value considering the inherent conservative uncertainty in the default values used to calculate the ECR (see the uncertainty section). The calculated HQ is well below the target HQ of 1.

### 5.4. Uncertainty Analysis

The HHSE was based on assumptions intended to overestimate risks to provide a conservative estimate of potential health effects. These conservative assumptions include:

- Use of the maximum detected concentration of a contaminant as the exposure concentration.

Discounting the attenuation and/or dilution of contaminants during transport from the secondary source to the receptor.

J&E includes attenuation - no ECR degradation

- The toxicity values used to calculate the cancer risk and hazard quotient and obtained from the referenced source have built-in factors of conservatism.
- Factors such as averaging time, exposure duration are overestimated as the likelihood of actual continuous chronic exposure averaged over the receptors lifetime for the exposure pathways of incidental ingestion of soil or dermal contact are very low.
- Residential standards.
- The risk calculation does not account for a reduced contaminant intake based on reduced bioavailability.

The calculated risk values are therefore, inherently conservative, and may overestimate risks by one or more orders of magnitude. In summary, the inhalation risk from the sample concentrations of naphthalene that is representative of the residual contamination is acceptable. Based on the results of this HHSE, the concentrations of naphthalene proposed to be left in place would not pose a health risk to future occupants of the site.

## 6. REMEDIAL ACTION PLAN

Based on the laboratory data collected to-date and the RA described above, the following areas are proposed to be mitigated by excavation. The following presents the areas to be excavated and the COCs found in each area. Ninyo & Moore proposes to excavate the impacted soil in each of these areas, following which confirmation samples will be collected and analyzed for the appropriate COC. Confirmation samples will include, at a minimum, one sample per wall and one floor sample from each excavation. The anticipated extent of the excavations associated with each area is shown on Figure 3. The depth and lateral extent may vary depending on the results of confirmation samples. Additional sampling may be warranted if the excavations exceed the areas shown on Figure 3. If needed, the number of confirmation samples will be discussed and agreed upon between Ninyo & Moore and the SFSFD prior to sample collection.

- **Boring POL1** – Laboratory results indicated elevated concentrations of total lead in a soil sample collected at a depth of approximately 5 feet bgs. Laboratory results of the soil sample collected at approximately 10 feet bgs in this boring indicated low concentrations of total lead (Table 1). The depth of the excavation is expected to be less than 7 to 8 feet bgs. Confirmation samples will be analyzed for total lead.

- **Boring POL2 and Confirmation Sample T5-2** – Laboratory results of a soil sample collected at a depth of approximately 15 feet bgs in boring POL2 indicated elevated concentrations of TPHg and TPHd. Laboratory results of the soil sample collected at 20 feet bgs in this boring indicated no detectable to low concentrations of TPHg and TPHd (Table 1). Shallower samples collected in the vicinity of this boring (see sample T5-2-9 on Table 2, collected at 9 feet bgs) also indicated elevated concentrations of TPHd and naphthalene. Soils will be excavated to anticipated depths of approximately 17 to 18 feet bgs. Confirmation samples will be analyzed for TPHg, TPHd, and naphthalene.
- **Boring POL3** – Laboratory results of a soil sample collected at approximately 10 feet bgs indicated elevated concentrations of TPHg and naphthalene (Table 1). The 5- and 15-foot samples collected from this boring indicated no detectable to low concentrations of TPHg and naphthalene. Following removal of the clean overburden to depths of approximately 5 to 7 feet bgs, the impacted soils will be excavated to an anticipated depth of approximately 12 to 13 feet bgs. Confirmation samples will be analyzed for TPHg and naphthalene.
- **Pipeline P1-1** – Laboratory results of a soil sample collected at a depth of approximately 2.5 feet bgs indicated elevated concentrations of total lead, exceeding the PRGr value. Because total copper exceeded ten times the Soluble Threshold Limit Concentration (STLC), soluble copper was analyzed using the Waste Extraction Test (WET) method. Laboratory results indicated elevated concentrations of soluble copper. The depth of the excavation is expected to be less than 5 feet bgs. The confirmation samples will be analyzed for total lead and total copper.
- **Pipeline P1-5** – Laboratory results of a soil sample collected at a depth of approximately 1.5 feet bgs indicated elevated concentrations of total lead, exceeding ten times the STLC and the PRGr value. Further analysis indicated elevated concentrations of soluble lead using the WET method. The depth of the excavation is expected to be less than 3 feet bgs. The confirmation samples will be analyzed for total lead.

← Disposal of excavated areas as hazardous waste?

## 7. SITE RESTORATION

Following the excavation of the impacted soils, the excavations will be backfilled with imported soils and/or on-site soils. The areas will be compacted and a compaction report will be provided to the General Contractor as part of the grading and redevelopment activities.

## 8. DISCUSSION

The ASTs and industrial wastewater unit previously used on the site have been removed. Based on the results of an initial soil boring investigation and subsequent confirmation soil samples col-

lected following removal activities, five areas of petroleum hydrocarbon, metal, and/or naphthalene impacted soils were discovered. Because the areas appear to be limited in volume, Ninyo & Moore proposes to excavate and remove the impacted soils. Following completion of the excavation activities, a soil remediation report will be prepared and submitted to the SFSFD. The report will request that a no further action (NFA) letter be issued for the ASTs and industrial wastewater unit by the SFSFD.

Naphthalene is a chemical that is associated with petroleum hydrocarbons. The proposed excavation activities will mitigate most of the soils that contain elevated concentrations of naphthalene during the removal of the soils that contain elevated concentrations of petroleum hydrocarbons. However, some soils that contain lower concentrations of naphthalene and petroleum hydrocarbons will be left in place. Based on the results of the HHSE completed for naphthalene using residential standards, the concentrations of naphthalene proposed to be left in place would not pose a health risk to future occupants of the site.

## 9. RECOMMENDATION

Based on the chemical data collected at the site and the limited RA completed for naphthalene, Ninyo & Moore recommends that soils containing elevated concentrations of petroleum hydrocarbons, metals, and naphthalene be excavated and removed from the site. The soils containing lower concentrations of chemicals below regulatory and/or HHSE standards can be left in place.



#### 10. REFERENCE

- Ninyo & Moore, 2004a, Results of Subsurface Investigation, Bloomfield II Property, Plegel Oil Company Lease, Santa Fe Springs, California: Letter report prepared for SARES-REGIS Group, Irvine, California, dated February 13.
- Ninyo & Moore, 2004b, General Work Plan to Close Aboveground Storage Tanks and Industrial Wastewater Unit, Bloomfield II Property, Plegel Oil Company Lease, Santa Fe Springs, California: Work plan prepared for the Santa Fe Springs Fire Department, Santa Fe Springs, California, dated September 21.
- Ninyo & Moore, 2004c, Addendum to the General Work Plan dated September 21, 2004, Bloomfield II Property, Plegel Oil Company Lease, Santa Fe Springs, California: Addendum to the work plan prepared for the Santa Fe Springs Fire Department, Santa Fe Springs, California, dated October 5.
- Regional Water Quality Control Board, Los Angeles Region, 1996, Interim Site Assessment & Cleanup Guidebook, dated May.
- United States Environmental Protection Agency (USEPA), 2003, Vapor Intrusion and RCRA Corrective Action (CA), Environmental Indicators (EI) Fact Sheets, Office of Emergency and Remedial Response, dated June 17.

SEP  
medium areas

TABLE 1 - SUMMARY OF SOIL SAMPLES COLLECTED FROM THE INITIAL SOIL BORINGS

Sample Number	Sample Depth (ft-bgs)	TPHcc			VOCs (mg/kg)	Title 22 Metals (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead TCLP (mg/l)
		<C <sub>12</sub> (mg/kg)	C <sub>13</sub> -C <sub>22</sub> (mg/kg)	C <sub>23</sub> -C <sub>32+</sub> (mg/kg)				
POL1-5	5	99	650	2,220	ND	Arsenic 14 Lead 520	4.2	2.4
POL1-10	10	--	--	--	--	Arsenic 11 Lead 5	--	--
POL1A-10	10	ND	ND	ND	--	--	--	--
POL1A-15	15	ND	ND	95	--	--	--	--
POL1A-20	20	ND	ND	23	--	--	--	--
POL1A-25	25	ND	ND	ND	--	--	--	--
POL1-30	30	ND	ND	ND	ND	<PRGr and/or background	--	--
POL2-15	15	2,600	8,800	9,300	1,2,4-Trimethylbenzene 0.15 1,3,5-Trimethylbenzene 0.0056 Ethylbenzene 0.037 4-Isopropyltoluene 0.041 Isopropylbenzene 0.097 n-Propylbenzene 0.16 n-Butylbenzene 0.069 sec-Butylbenzene 0.11 tert-Butylbenzene 0.0083 Naphthalene 0.41 Xylenes 0.012	<PRGr and/or background	--	--
POL2-20	20	ND	29	22	ND	--	--	--
POL2-25	25	310	2,000	1,500	sec-Butylbenzene 0.62 Naphthalene 3.0	--	--	--
POL2-30	30	ND	ND	ND	ND	--	--	--
POL2A-35	35	ND	ND	ND	--	--	--	--
POL2A-40	40	ND	ND	ND	--	--	--	--
POL2A-45	45	ND	ND	ND	--	--	--	--
POL2A-50	50	ND	ND	ND	--	--	--	--

TABLE 1 - SUMMARY OF SOIL SAMPLES COLLECTED FROM THE INITIAL SOIL BORINGS

Sample Number	Sample Depth (ft-bgs)	TPHee			VOCs (mg/kg)	Title 22 Metals (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead TCLP (mg/l)
		<C <sub>12</sub> (mg/kg)	C <sub>13</sub> -C <sub>22</sub> (mg/kg)	C <sub>23</sub> -C <sub>32</sub> + (mg/kg)				
POL3-5	5	470	1,650	1,440	Isopropylbenzene 0.22 n-Propylbenzene 0.31 n-Butylbenzene 0.011 sec-Butylbenzene 0.089 Naphthalene 0.40	--	--	--
POL3-10	10	2,200	6,300	6,900	n-Propylbenzene 0.57 n-Butylbenzene 0.69 sec-Butylbenzene 2.8 Naphthalene 7.0	--	--	--
POL3-15	15	ND	ND	ND	ND	--	--	--
POL3A-20	20	ND	ND	ND	--	--	--	--
POL3A-25	25	ND	ND	ND	--	--	--	--
POL3A-30	30	ND	ND	ND	--	--	--	--
POL3A-35	35	ND	52	20	--	--	--	--
POL4-5	5	ND	580	5,100	--	--	--	--
POL5-5	5	ND	ND	340	ND	<PRGr and/or background	--	--
POL5-20	20	ND	ND	ND	ND	--	--	--
POL6-5	5	ND	ND	ND	--	--	--	--
POL6-10	10	ND	ND	ND	--	--	--	--
POL7-5	5	ND	ND	ND	ND	--	--	--
POL7-20	20	ND	ND	ND	ND	--	--	--
POL8-5	5	ND	ND	ND	ND	--	--	--
POL8-20	20	ND	ND	ND	ND	--	--	--
POL9-5	5	ND	ND	ND	--	--	--	--
POL10-5	5	ND	ND	ND	ND	--	--	--
POL10-20	20	ND	ND	ND	ND	--	--	--
POL11-5	5	ND	ND	ND	ND	--	--	--
POL11-20	20	ND	ND	ND	ND	--	--	--

**TABLE 1 - SUMMARY OF SOIL SAMPLES COLLECTED FROM THE INITIAL SOIL BORINGS**

Sample Number	Sample Depth (ft-bgs)	TPHcc			VOCs (mg/kg)	Title 22 Metals (mg/kg)	Soluble Lead WET (mg/l)	Soluble Lead TCLP (mg/l)
		<C <sub>12</sub> (mg/kg)	C <sub>13</sub> -C <sub>22</sub> (mg/kg)	C <sub>23</sub> -C <sub>32</sub> + (mg/kg)				
Maximum Soil Screening Levels		1,600	7,500	36,000	1,2,4-Trimethylbenzene 52/NA 1,3,5-Trimethylbenzene 28/NA Ethylbenzene 8.9/7 4-Isopropyltoluene NA/NA Isopropylbenzene NA/NA n-Butylbenzene 240/NA n-Propylbenzene 240/NA sec-Butylbenzene 220/NA tert-Butylbenzene 390/NA Naphthalene 1.7/NA Xylenes 270/20	Lead: PRGr - 150 TTLC - 1,000 STLC - 5 10 x STLC - 50	STLC - 5	TCLP - 5

**Notes:**

ft bgs - feet below ground surface

TPHcc - Total Petroleum Hydrocarbon Chain Identification analyzed by EPA Method 8015 modified

VOCs - Volatile Organic Compounds analyzed by EPA Method 8260B

Title 22 Metals - analyzed by EPA Method 6010/7000

WET - Waste Extraction Test

TCLP - Toxicity Characteristic Leaching Procedure

Maximum soil screening levels obtained from the Interim Site Assessment & Cleanup Guidebook dated May 1996 by the California Regional Water Quality Control Board

mg/kg - milligrams per kilogram

mg/l - milligrams per liter

"-" - not analyzed

Maximum soil screening levels obtained from the City of Santa Fe Springs Soil Assessment and Remediation Guidelines for Commercial/Industrial Sites, the Regional Water Quality Control Board, Los Angeles Region (RWQCB) Interim Site Assessment & Cleanup Guidebook dated May 1996, or the PRGr values. The negotiated screening level for arsenic is 13 mg/kg. Maximum soil screening level for VOCs are presented in PRGr values/RWQCB values (using Table 4-1, for the conservative values of sandy conditions at 80 feet above groundwater)

PRGr - Preliminary Remediation Goal for residential use

NA - not applicable

ND - not detected above laboratory reporting limits (see individual laboratory reports for analyte detection limits)

TABLE 2 – SUMMARY OF SOIL SAMPLES COLLECTED BENEATH THE FORMER ABOVEGROUND STORAGE TANKS AND INDUSTRIAL WASTEWATER UNIT

Sample No.	Location	Depth (ft bgs)	TPH <sub>CC</sub>			VOCs (mg/kg)	Title 22 Metals (mg/kg)	PNAs (mg/kg)	Soluble metals WET analysis (mg/l)	Soluble lead TCLP analysis (mg/l)
			C <sub>6</sub> -C <sub>11</sub> (mg/kg)	C <sub>12</sub> -C <sub>14</sub> (mg/kg)	C <sub>15</sub> -C <sub>20</sub> (mg/kg)					
T1-1	Test Pit 1 Excavated Beneath Tank 1	2	41	6,900	9,300	Isopropylbenzene 1.9 Propylbenzene 2.8 n-Butylbenzene 0.61 sec-Butylbenzene 1.3 Naphthalene 9.3	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T1-2	Test Pit 2 Excavated Beneath Tank 1	2	ND	31	340	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T1-3	Test Pit 3 Excavated Beneath Tank 1	2	ND	35	430	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T2-1	Test Pit 1 Excavated Beneath Tank 2	2	15	2,490	3,690	1,2,4-Trimethylbenzene 0.250 1,3,5-Trimethylbenzene 0.028 Ethylbenzene 0.016 4-Isopropyltoluene 0.017 Isopropylbenzene 0.033 n-Propylbenzene 0.045 n-Butylbenzene 0.012 sec-Butylbenzene 0.017 Naphthalene 0.110 Xylenes 0.059	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T2-2	Test Pit 2 Excavated Beneath Tank 2	2	ND	104	85	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T2-3	Test Pit 3 Excavated Beneath Tank 2	2	ND	ND	32	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T3-1	Test Pit 1 Excavated Beneath Tank 3	2	ND	ND	32	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T3-2	Test Pit 2 Excavated Beneath Tank 3	2	ND	ND	36	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T3-3	Test Pit 3 Excavated Beneath Tank 3	2	--	--	--	--	--	--	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T4-1	Test Pit 1 Excavated Beneath Tank 4	2	ND	19.6	55	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--
T4-2	Test Pit 2 Excavated Beneath Tank 4	2	ND	4	9.8	ND	< PRGr and/or background	ND	--	--
		5	--	--	--	--	--	--	--	--
		10	--	--	--	--	--	--	--	--

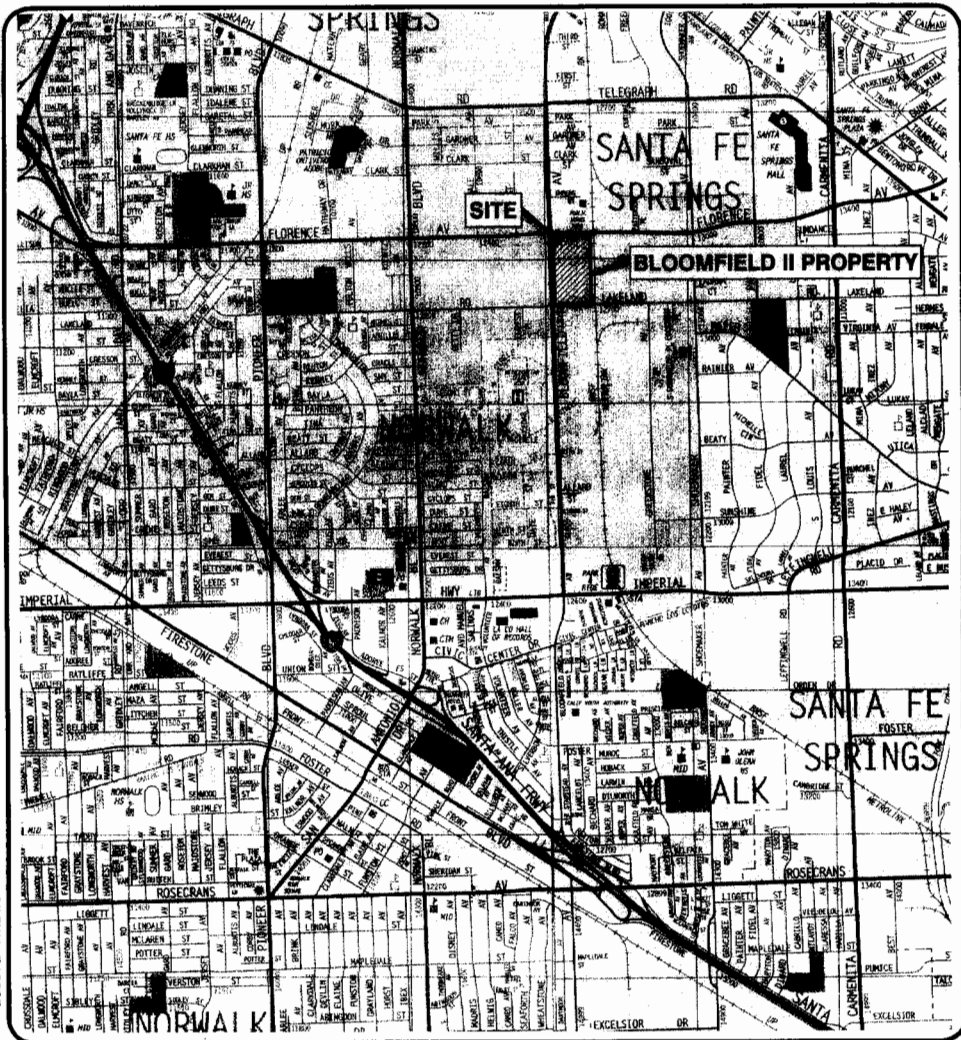
TABLE 2 - SUMMARY OF SOIL SAMPLES COLLECTED BENEATH THE FORMER ABOVEGROUND STORAGE TANKS AND INDUSTRIAL WASTEWATER UNIT

Sample No.	Location	Depth (ft bgs)	TPH <sub>OC</sub>			VOCs (mg/kg)	Title 22 Metals (mg/kg)	PNAs (mg/kg)	Soluble metals WET analysis (mg/l)	Soluble lead TCLP analysis (mg/l)
			C <sub>7</sub> -C <sub>12</sub> (mg/kg)	C <sub>13</sub> -C <sub>22</sub> (mg/kg)	C <sub>23</sub> -C <sub>32</sub> (mg/kg)					
T5-1	Beneath 2nd Stage Wastewater Separator	9	440	6,000	4,300	Ethylbenzene 0.027 Isopropylbenzene 0.14 n-Butylbenzene 0.038 sec-Butylbenzene 0.11 n-Propylbenzene 0.23 Naphthalene 16	<PRGr and/or background	2-Methylnaphthalene 53 Naphthalene 17	--	--
T5-2	Beneath 2nd Stage Wastewater Separator	9	4.5	7,700	6,100	1,2,4-Trimethylbenzene 0.17 Ethylbenzene 0.11 4-Isopropyltoluene 0.045 Isopropylbenzene 0.26 n-Propylbenzene 7.2 n-Butylbenzene 0.058 sec-Butylbenzene 0.18 Naphthalene 28	<PRGr and/or background	2-Methylnaphthalene 60 Naphthalene 22	--	--
T6-1	Beneath 1st Stage Wastewater Separator	2	1.2	83	440	ND	<PRGr and/or background	ND	--	--
T6-2	Beneath 1st Stage Wastewater Separator	2	ND	15	32	ND	<PRGr and/or background	ND	--	--
T7-1	Beneath Clarifier	4	ND	13	77	ND	<PRGr and/or background	ND	--	--
T7-2	Beneath Clarifier	4	3.2	17	49	1,2,4-Trimethylbenzene 0.031 1,3,5-Trimethylbenzene 0.012 Benzene 0.023 Toluene 0.016 Naphthalene 0.014 Xylenes 0.10	<PRGr and/or background	ND	--	--
P1-1	Beneath Pipeline 1	2.5	ND	220	900	ND	Copper 1,500 Lead 200 All Others <PRGr and/or background	ND	Copper 56.2 Lead 4.82	ND
P1-2	Beneath Pipeline 1	2.5	ND	58.5	301.6	ND	Lead 85 All Others <PRGr and/or background	ND	Lead 1.93	--
P1-3	Beneath Pipeline 1	2	ND	61.2	228	ND	Lead 61 All Others <PRGr and/or background	ND	Lead 0.72	--
P1-4	Beneath Pipeline 1	1.5	ND	58.5	320	ND	Lead 74 All Others <PRGr and/or background	ND	Lead 1.60	--
P1-5	Beneath Pipeline 1	1.5	ND	49	302.9	ND	Lead 230 All Others <PRGr and/or background	ND	Lead 6.66	ND
P1-6	Beneath Pipeline 1	1.5	ND	96.7	357.6	ND	Lead 120 All Others <PRGr and/or background	ND	Lead 3.08	ND

TABLE 2 – SUMMARY OF SOIL SAMPLES COLLECTED BENEATH THE FORMER ABOVEGROUND STORAGE TANKS AND INDUSTRIAL WASTEWATER UNIT

Sample No.	Location	Depth (ft bgs)	TPH <sub>EC</sub>			VOCs (mg/kg)	Title 22 Metals (mg/kg)	PNAs (mg/kg)	Soluble metals WET analysis (mg/l)	Soluble lead TCLP analysis (mg/l)
			C <sub>7</sub> -C <sub>12</sub> (mg/kg)	C <sub>13</sub> -C <sub>22</sub> (mg/kg)	C <sub>23</sub> -C <sub>32</sub> (mg/kg)					
	Maximum Soil Screening Levels		1,600	7,500	36,000	1,2,4-Trimethylbenzene 52/NA 1,3,5-Trimethylbenzene 28/NA Ethylbenzene 8.9/7 4-Isopropyltoluene NA/NA Isopropylbenzene NA/NA n-Propylbenzene 240/NA n-Butylbenzene 240/NA sec-Butylbenzene 220/NA 2-Methylnaphthalene NA/NA Benzene 0.6/0.033 Naphthalene 1.7/NA Xylenes 270/20	Copper: PRGr – 3,100 TTLc – 2,500 STLC – 25 10 x STLC – 250  Lead: PRGr – 150 TTLc – 1,000 STLC – 5 10 x STLC – 50	NA	Copper: STLC – 25  Lead: STLC-5	Lead 5
<p>Notes:</p> <p>ft bgs – feet below ground surface</p> <p>TPH<sub>EC</sub> – Total Petroleum Hydrocarbon Chain Identification analyzed by EPA Method 8015 modified</p> <p>VOCs – Volatile Organic Compounds analyzed by EPA Method 8260B</p> <p>Title 22 Metals – analyzed by EPA Method 6010/7000 Series</p> <p>PNAs – poly nuclear aromatic hydrocarbons analyzed by EPA Method No. 8270B</p> <p>WET – waste extraction test</p> <p>TCLP – toxicity characteristic leaching procedure</p> <p>PRGr – Preliminary Remediation Goal for residential use</p> <p>Maximum soil screening levels obtained from the City of Santa Fe Springs Soil Assessment and Remediation Guidelines for Commercial/Industrial Sites, the Regional Water Quality Control Board, Los Angeles Region (RWQCB) Interim Site Assessment &amp; Cleanup Guidebook dated May 1996, or the PRGr values. The negotiated screening level for arsenic is 13 mg/kg.</p> <p>mg/kg – milligrams per kilogram</p> <p>mg/l – milligrams per liter</p> <p>"-" – not analyzed</p> <p>NA – not applicable</p> <p>ND – not detected above laboratory reporting limits (see individual laboratory reports for analyte detection limits)</p> <p>Maximum soil screening level for VOCs are presented in PRGr values/RWQCB values (using Table 4-1, for the conservative values of sandy conditions at 80 feet above groundwater)</p>										

205372-A1.DWG



REFERENCE: 2000 THOMAS GUIDE FOR LOS ANGELES AND ORANGE COUNTIES, STREET GUIDE AND DIRECTORY.



0 2400 4800  
APPROXIMATE SCALE IN FEET

***Ningo & Moore***

### SITE LOCATION MAP

BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO.

205372005

DATE

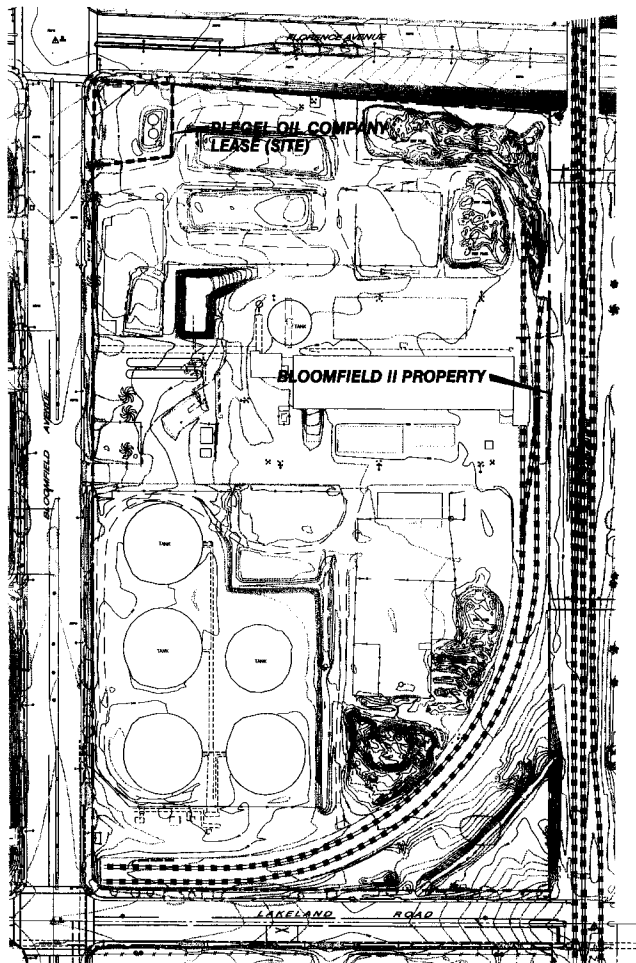
1/2005

FIGURE

1



205372-A2.DWG



0 200 400

APPROXIMATE SCALE IN FEET

REFERENCE: BASE MAP PROVIDED BY THEINES ENGINEERING.  
NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

#### LEGEND

- BLOOMFIELD II PROPERTY BOUNDARY
- PLEGEL OIL COMPANY LEASE

#### SITE PLAN

BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

**Ninyo & Moore**

PROJECT NO.

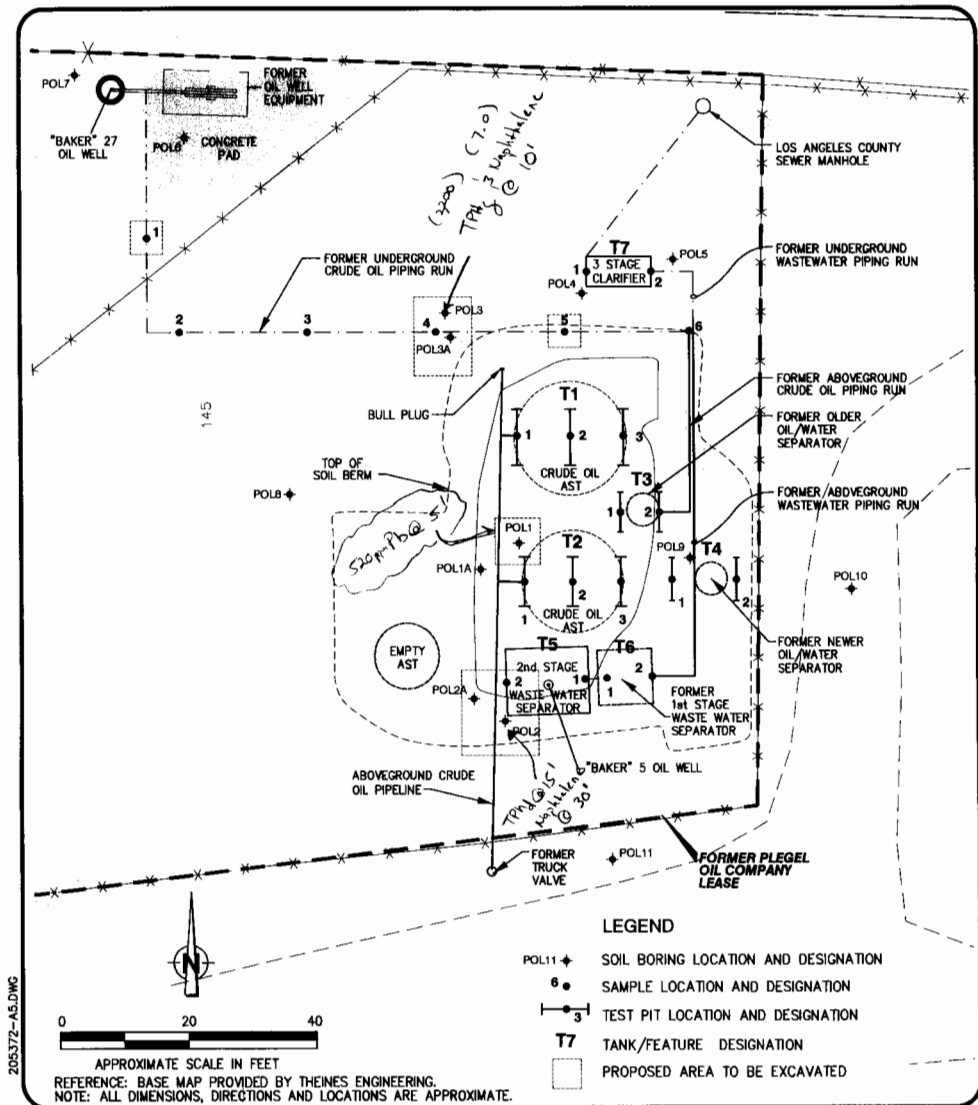
205372005

DATE

1/2005

FIGURE

2



### SAMPLE LOCATION MAP

**BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA**

PROJECT NO.

205372005

DATE \_\_\_\_\_

1/2005

FIGURE

3

12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

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**APPENDIX A**  
**CLOSURE PERMITS**



# City of Santa Fe Springs

## Headquarters Fire Station

11300 Greenstone Ave. • CA • 90670-4619 • (562) 944-9713 • Fax (562) 941-1817 • [www.santafesprings.org](http://www.santafesprings.org)

October 6, 2004

Paul Roberts  
Ninyo & Moore  
475 Goddard  
Irvine, CA 92618

Dear Mr. Roberts:

**Subject: CLOSURE AUTHORIZATION FOR THE EXISTING 2-STAGE WASTE WATER SEPARATOR  
AND 3-STAGE CLARIFIER AND @ 12600 FLORENCE AVENUE**

Enclosed is your copy of the closure authorization for the removal of the existing 2-stage waste water separator and the 3-stage clarifier located at the Baker Lease oil production site, 12600 Florence Avenue. Compliance with the *Conditions and Limitations* listed on the back of the application and sampling in accordance with the General Work Plan dated September 21, 2004 and amended October 5, 2004 is necessary to ensure proper closure. You are required to schedule a closure inspection 72-hours prior to the removal. Failure to provide proper notification may void this authorization for closure and result in additional site investigation requirements.

The Environmental Protection Division may require additional site investigations if signs of contamination are evident. The permittee is responsible for complying with additional requirements imposed by this Department.

If you have any questions regarding this matter, please contact Tom Hall, Industrial Waste Engineer, at (562) 906-3715

Sincerely,

Thomas Hall  
Environmental Protection Specialist

Enclosure

**City of Santa Fe Springs Fire Department**  
**Fire Protection Division • Environmental Protection Division**

C-

11300 Greenstone Avenue • Santa Fe Springs CA 90670-4619 • (562) 944-9713 FAX (562) 941-1817

**Industrial Waste Application for Closure**

**Business Information**

<b>Business Name</b> <u>Bloomfield Partners II, LLC</u>			
<b>Company Contact</b> <u>Patrick Russell</u>	<b>Position</b>	<b>Phone number:</b> <u>(949) 756-5959</u>	
<b>Site address</b> <u>12600 Florence Ave.</u>	<b>City</b> <u>Santa Fe Springs</u>	<b>State</b> <u>CA</u>	<b>Zip</b>
<b>Mailing address</b> <u>18802 Breen Ave</u>	<b>City</b> <u>Irvine</u>	<b>State</b> <u>CA</u>	<b>Zip</b> <u>92612</u>

**Contractor Information**

<b>Contractor Name</b> <u>Paul Roberts</u>	<b>Contractor License</b> <u>697063A</u>	<b>Exp. Date</b> <u>10/31/04</u>
<b>Company Name</b> <u>Ninyo &amp; Moore</u>	<b>Phone Number</b> <u>(949) 753-7070</u>	
<b>Mailing Address</b> <u>475 Goddard</u>	<b>City</b> <u>Irvine</u>	<b>State</b> <u>CA</u> <b>Zip</b> <u>92618</u>

**Type of Closure Requested**-All closures under this application must meet the requirements and conditions listed on reverse.

- ☒ Treatment unit removal (see conditions A, B, C, E, and F on reverse)
- ☐ Treatment unit abandonment in place (see conditions A, B, C, D, and F on reverse)

**Description of Waste Generating Operations Being Closed**

<b>Type of business</b> <u>Oil production</u>	<b>IW Permit Number</b> <u>15403</u>
<b>Source of wastewater</b> <u>Oil/water separator</u>	
<b>Type of treatment unit</b> <u>Oil/water separator</u>	
Has an unauthorized release ever occurred at this site?	<input type="checkbox"/> YES <input type="checkbox"/> NO
Have structural repairs ever been made to the treatment unit?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Will new treatment unit(s) be installed after closure?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Will industrial waste generating operations remain after closure?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
If the answer is YES to any of the above questions, attach an explanation.	

The applicant agrees to submit any additional information necessary to aid in the permit evaluation process. Approved permits may be subject to additional conditions and limitations. An inspection fee may be required upon permit issuance. The applicant's signature certifies under penalty of perjury that all statements and disclosures above are true and correct and that they have read agree to abide by this closure authorization and all conditions and limitations on the reverse side of this form and any additional conditions that may be attached.

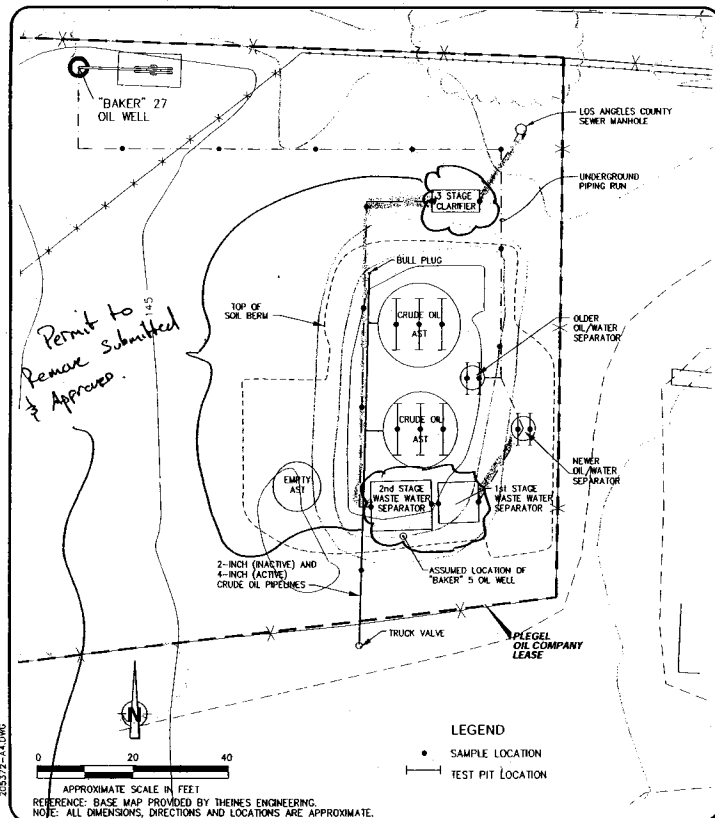
<b>Applicant's Name</b> <u>Paul Roberts</u>	<b>Signature</b> <u>X Paul Roberts</u>	<b>Date</b> <u>9-22-04</u>
<b>Position</b> <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Contractor		

Return this application, all required plans and supporting information, with the application and plan review fee.

**TO BE COMPLETED BY THE SANTA FE SPRINGS FIRE DEPARTMENT**

Permission is hereby granted to proceed with the closure described above subject to the attached conditions and limitations. This permit expires 180 days from the date below.

<b>Neal Welland</b> Fire Chief	<b>Inspector</b> <u>Tom Hall</u>	<b>Date Approved</b> <u>10/5/04</u>
<b>Fee Amount</b> <u>\$150.00</u>	<b>Date Paid</b> <u>9/27/04</u>	<b>Received By</b> <u>Thy</u>



**Ninyo & Moore**

**PROPOSED SAMPLE LOCATION MAP**

BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO.  
205372005

DATE  
10/2004

FIGURE  
1

City of Santa Fe Springs  
Fire Department  
Environmental Protection Division

**APPROVED FOR THE FOLLOWING PROGRAMS**

☒ Industrial Waste - Closure  
☒ Industrial Waste - Storage  
☒ Environmental Risk Assessment

Subject to field inspection and required test, notations hereon, conditions in correspondence and conformance with applicable regulations. The stamping of these plans shall not be held to warrant or approve the violation of any regulation of the law.

*Alan Hall* Date 10/6/04

City of Santa Fe Springs Fire Department • Certified Unified Program Agency  
11300 Greenstone Avenue  
Santa Fe Springs, CA 90670  
Phone (562) 944-9713 • Fax (562) 941-1817

APPLICATION FOR STORAGE TANK CLOSURE

☒ ABOVEGROUND ☐ UNDERGROUND

FACILITY NAME: Former Plegel Oil Lease Property

LOCATION: 12600 Florence Ave.

RESPONSIBLE PARTY INFORMATION:

Name Bloomfield Partners II, LLC

Mailing Address 18802 Bardaan Ave City Irvine State CA Zip 92612

Contact Person Patrick Russell Phone 949-756-5959

☒ CONTRACTOR OR ☐ OWNER/OPERATOR AS CONTRACTOR Please indicate by checking appropriate box. A list of all subcontractors must be provided. List must include subcontractor name, address, phone number, scope of work, and a copy of the contractor's license.

Name Ninyo & Moore State License Number 697063 A

Address 475 Gobbler City Irvine State CA Zip 92618

Contact Person Paul Roberts Phone 949-753-7070

CLOSURE REQUESTED: All closures under this application must meet the requirements and conditions listed below.

☐ Permanent, tank removal, non-hazardous (see condition A attached)

☒ Permanent, tank removal, hazardous (see condition B attached)

☐ Permanent, closure in place (see condition C attached).

☐ Temporary (see condition D attached)

☐ Monitoring well abandonment (see Condition E attached)

DATE TANK SYSTEM WILL BE CLEANED AND/OR EXCAVATED, OR CLOSED: \_\_\_\_\_ INTENDED DISPOSITION OF TANK \_\_\_\_\_

INTENDED DESTINATION OF TANK SYSTEM (location name and address): \_\_\_\_\_

COMPLETE THE FOLLOWING:

TANK ID NUMBER (Use state tank ID# for underground tanks)	TANK MATERIAL	AGE IN YEARS	CAPACITY	LAST MATERIAL STORED/PAST MATERIAL STORED PER CC467183.3(D)(1)
1	Steel	Unknown	10,500	Crude Oil
2	Steel	Unknown	10,500	Crude Oil
3	Steel	Unknown	2,500	Oil/Water
4	Steel	Unknown	2,500	Oil/Water

Has an unauthorized release ever occurred at this site?

YES

NO

Have structural repairs ever been made to these tanks?

☐

☒

Will new tanks be installed after this closure?

☐

☒

How many tanks will remain after this closure?

ASTs 0 USTs 0

By signature below the applicant certifies that they have read, understand, and agree to abide by the Storage Tank Closure Requirements and Conditions, the Notification/Permit Requirements and Contractor's Declaration, the Notice to Closure Permit Applicants, and all other conditions and limitations attached. Additional guidelines are available upon request. By signature below you declare you are authorized to certify on behalf of the tank operator that the identity of the last material or waste stored or accumulated in the tank is true and correct.

Applicant's Signature Paul Roberts

Date 9-22-04

Print Name Paul Roberts

Phone 949-753-7070

Title (please check): ☐ Owner ☐ Operator ☒ Contractor

TO BE COMPLETED BY THE SANTA FE SPRINGS FIRE DEPARTMENT

PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS. THIS PERMIT EXPIRES 180 DAYS FROM THE DATE BELOW.

Neal Welland

Inspector

Date Approved

9/22/04

## CLOSURE REPORT REQUIREMENTS

- 1. A closure report for storage tanks shall be submitted to the Santa Fe Springs Fire Department containing the items listed below. All closure report requirements must be submitted to the Fire Department within 30 days from the sampling date or 180 days from the data of this permit, whichever is earlier.
- 2. Site address of tank closure location. ✓
- 3. Plot plan to scale showing the location of tanks, sampling points, buildings, adjacent streets, and a north arrow. Use a legend to identify tank size and past contents. ✓
- 4. Description of methods for obtaining, handling, and transporting samples. ✓
- 5. Time and date samples were obtained. ✓
- 6. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain of custody, and groundwater location) for tank closure shall be certified by a California Registered Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils. The certification must clearly state that all work was done under the supervision of the person signing. ✓
- 7. Chain of custody documentation initiated by the person obtaining samples through the person at a Cal/EPA Department of Toxic Substances Control certified laboratory. ✓
- 8. Copy of "clean" closure certification signed by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional. ✓
- 8. Copy of Santa Fe Springs Building Department permit. This is required on all underground tank closures and some aboveground tank closures.
- 9. Disposal destination of tanks and legal evidence of disposal. Include copy of the Storage Tank Closure Certification form if tanks were removed as hazardous waste. ✓
- 10. Disposal documentation, such as manifests, signed by the receiving facility, for the disposal of any removed soil, tank rinseate, and/or remaining tank contents. Records shall also include a proper waste determination for all waste material related to the removal of the tank(s). ✓
- 11. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, method of extraction, and method of analysis. ✓
- 12. Documentation as to depths of groundwater at facility. ✓
- 13. Any observations of site contamination. ✓
- 14. Remedial action plan to mitigate contamination. ✓
- 15. Report to be signed by a California Registered Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils. ✓



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## NOTIFICATION/PERMIT REQUIREMENTS AND CONTRACTOR'S DECLARATION

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Storage tank work is subject to compliance with all applicable laws and regulations relating to the performance of work including, but not limited to, business license requirements, Building Codes, Fire Codes, Air Quality regulations, Health and Safety Codes, Water Codes and Transportation regulations.

You are required to complete **ALL** of the agency notifications indicated below within 24 hours prior to the commencement of work on this project. A request for an inspection within 24 hours does not guarantee you will receive the desired inspection appointment time. You may want to schedule appointments in advance of the 24-hour minimum requirement.

### 24 HOUR NOTIFICATION REQUIRED TO:

- ( X ) City of Santa Fe Springs Fire Department  
11300 Greenstone Avenue  
Santa Fe Springs, CA 90670  
(562) 944-9713  
(562) 941-1817 FAX
- ( X ) City of Santa Fe Springs Building Department  
11710 E. Telegraph Road  
Santa Fe Springs, CA 90670  
(562) 868-0511  
(562) 868-7112 FAX
- ( X ) South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909) 396-2000

**FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS, AND/OR ADMINISTRATIVE PENALTIES AS PROVIDE BY LAW.**

I declare I have personally read the permit application for installation/removal of aboveground/underground storage tanks and will follow all the requirements. I declare that the statements and information provided are true and correct. I understand that no work is to begin on the project until the application and plans are approved. I have a City of Santa Fe Springs Business Operators Tax Certificate. I understand that the Santa Fe Springs Fire Department must be contacted at least 24 hours in advance to schedule each required inspection. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that the responsibility is not shared nor assumed by the City of Santa Fe Springs. I understand that a Health and safety Plan shall be prepared before performing any site work and that a copy of that Plan shall be available on the job site. I understand that a late fee will be charged as a result of an inspection not being canceled in a timely manner or a "not ready for inspection" condition existing upon arrival of a Fire Department Inspector. I understand that variations from the approved plans void the approval of the plans.

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## NOTICE TO CLOSURE PERMIT APPLICANTS

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The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 6, 1988.

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

- § Notify the SCAQMD Executive Officer by telephone at (310) 403-6000 24 hours prior to tank excavation. 1166 (c) (1) (A)
- § Monitor the excavated material during the excavation for VOC contamination. 1166 (C) (1) (B)
- § When VOC contamination is detected:
  - § Cease excavation
  - § Cover the contaminated soil until implementation of approved mitigation measures. 1166 (c) (1) (C)
  - § Notify the SCAQMD Executive Officer at (714) 396-2000 within 24 hours of detection of VOC contaminated soil. 1166 9 (c) (2) (A)
- § A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation or VOC to the atmosphere. 1166 (c) (3)

## EXEMPTIONS

- § Treatment of less than one (1) cubic yard of contaminated soil. 1166 (d) (1) (A)
- § Decontamination of soil containing organic compounds that have initial boiling point of 302 °F or greater, Reid Vapor Pressure less than 80 mm Hg or Absolute Vapor Pressure less than 36 mm Hg at 20 °C. 1166 (d) (1) (B). (F)
- § Removal of soil for sampling purposes pursuant to EPA methods. 1166 (d) (1) (C)
- § Accidental spillage of five (5) gallons or less of VOC. 1166 (d) (1) (D)
- § Documentation of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 166 (d) (1) (E)

**SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT (909) 396-2000**

## CLOSURE PERMIT SAMPLING SUPPLEMENT

Part 1 of 2

The owner or operator of an underground storage tank being closed shall demonstrate to the satisfaction of the Santa Fe Springs Fire Department that no unauthorized release has occurred. This demonstration shall be based on soil sample analysis and/or water analysis. These requirements are in addition to the conditions listed on the Application for Storage Tank Closure or contained in an approved Closure Plan. Additional guidelines regarding soil sampling requirements are available upon request.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.
2. Samples shall be obtained at the depths identified below. \*All samples shall be tested by Method 8015 M and 8260 B for all volatile organic compounds (VOC) using preparatory method 5035.
3. Refer to *Soil Sampling Addendum for Volatile, Semi-Volatile and Extremely Hazardous Materials*.

SP	Depth(s)	Compounds	Analysis Method
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To Be included  
in the sampling  
workplan for the  
entire site

## CLOSURE PERMIT SAMPLING SUPPLEMENT

Part 2 of 2

4. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.
5. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most down gradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.
6. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppm) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.
7. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determination; d) The method of analysis; e) Signature of chemist certifying results.
8. All soil/groundwater samples obtained shall be handled and transported to the laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.
9. If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.
10. A final report that contains all of the above required information shall be submitted to the office above within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

\*Note: per Health and Safety Code, §25299.37.1 and Los Angeles Regional Water Quality Control Board

# STORAGE TANK CLOSURE REQUIREMENTS AND CONDITIONS

A permit is required to perform storage tank closure work. No on-site work shall begin until plans have been submitted and approved by the Santa Fe Springs Fire Department. The Fire Department must witness parts of the work and an inspection must be scheduled at least 24 hours in advance. A fee is also required. Any other governmental agency having jurisdiction must be notified before starting closure work in order to obtain proper clearance, permits, and arrange for required inspections. A copy of the Health and Safety Plan and other necessary permits must be obtained and kept available at the site. A tank closure report is required for all aboveground storage tank removals when soil or groundwater sampling is required and all underground storage tank closures that are not temporary. The requirements for this report are listed under Closure Report Requirements.

## CONDITION A

### PERMANENT UNDERGROUND AND ABOVE GROUND STORAGE TANK REMOVALS

#### NON-HAZARDOUS METHOD

#### The Santa Fe Springs Fire Department Inspector shall witness items 8-14.

A minimum of two 2A 40 BC rated fire extinguishers must be on site no further than 75 feet from the tank removal location. Extinguishers must have a current State Fire Marshal's tag attached.

All ignition sources must remain at least 50 feet away from the excavation. No smoking signs shall be posted.

Colored tape, fencing, and/or appropriate barriers shall be used to maintain site security.

All tanks shall be monitored for flammability and oxygen by a monitoring device that has been calibrated within the last six months. A sticker or tag with the last calibration date must be on the unit.

All piping associated with the tank shall be removed and disposed of unless removal might cause damage to other structures or pipes that are being used in a common trench, in which case the piping to be closed. Pipeline abandonment procedures are available at the Fire Department upon request.

All liquids, including rinseate, shall be removed from the tank and connected piping prior to excavation by approved methods. Grounding and bonding procedures shall be followed. Hazardous waste shall be manifested and transported to a fully approved and permitted TSD facility by a Licensed Hazardous Waste Transporter. The fire inspector shall be provided with a copy of the Hazardous Waste Manifest. Associated piping, including vent lines, electrical lines, and in-tank pumps, shall be disconnected from the tank and removed from the ground unless approved by the Chief. Continuous supervision must be maintained during the operations by the contractor named on the permit.

Vapor recovery shall be in accordance with AQMD Rule 1149.

HFPA guidelines shall be followed for the cleaning process. Bonding and grounding shall be in place. No "hot" work is permitted any tanks that previously contained flammable or combustible materials. A pneumatic cold-cutting tool may be used to cut openings for the cleaning procedures. Use only beryllium or approved non-sparking tools. The lower explosive limit must be below 10% to conduct such work.

Each tank is cleaned on-site, certified by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional as "clean" and vapor free. Tank cleaning shall be

10. The Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional must take the lower explosive limit reading in the presence of the fire inspector before adding dry ice to the tank. The monitor must be properly calibrated. The LEL must be 0%.

11. A minimum of 15 pounds of dry ice per thousand gallons of tank capacity shall be placed into the tank.

12. The certified Marine Chemist or certified Industrial Hygienist shall apply an identification number and date to each tank that corresponds to the "certification". A copy of the signed "clean" closure certification form must be given to the fire inspector before he/she leaves the job site.

13. Tanks shall be lifted using a crane unless the contractor, at the time of permit application, can show the inspector that another piece of equipment is acceptable and safe. The tank exterior can only be cleaned with beryllium or non-sparking tools.

14. The tank shall be secured on an appropriate vehicle for immediate removal from the premises. The tank(s) shall be transported for material recycling or salvage with their respective certification(s). Demolition of above ground tanks shall be conducted as in the work plan approved by the Santa Fe Springs Fire Department.

15. In the event that a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional will not certify the tank as clean, the tanks shall be handled as a hazardous waste and be transported under all applicable regulations. See Condition B

16. Soil samples shall be taken as listed on the Closure Permit Sampling Supplement form.

17. Each tank will be allotted a maximum of one hour for removal, loading, off-site transportation, and soil sampling. Closure periods which exceed this time frame, are subject to the fire inspector's schedule and will be charged at the Fire Department hourly inspection rate.

18. The site shall be backfilled and compacted to a relative compaction of 90%.

19. All Closure Report Requirements must be submitted to the Fire Department within 30 days from the sampling date or

## CONDITION B

### PERMANENT UNDERGROUND AND ABOVE-GROUND STORAGE TANK REMOVALS

#### HAZARDOUS METHOD Per CHSC§67383.5

The Fire Department Inspector shall witness item numbers 4 - 6.

1. Items 1-7 as described for Condition A, shall be followed as applicable.
2. All residual liquids, solids, or sludges, shall be removed and handled as a hazardous waste or recyclable materials in accordance with Chapters 6.5 and 6.7 of the Health and Safety Code. NOTICE: Contaminated tanks and residues that may be left in tanks to be closed may be a hazardous waste which must be transported and disposed of pursuant to Chapter 6.5 of the California Health and Safety Code. Failure to comply may be prosecuted as a felony conviction.
3. The tank's interior atmosphere shall be inerted using 22.2 pounds of dry ice per 1000 gallons of tank capacity.
4. A Certified Industrial Hygienist, Certified Marine Chemist, or Certified Safety Professional shall take LEL readings with a CGI that has been properly calibrated. Oxygen content shall also be measured and must be below 8% or less than 50% of the oxygen concentration required to support combustion, whichever is less, during the entire period that work is in progress. The readings shall be taken at the top, center and bottom of the tank before it is loaded onto the transport vehicle.
5. All openings in the tank shall be plugged, except an 1/8 vent, Cracks, holes or other damage shall be covered to contain any release.
6. Items 16 -19 as identified in Condition A shall be complied with.

*Determined to  
by "non-haz"  
Included*

## CONDITION C

### PERMANENT IN PLACE UNDERGROUND STORAGE TANK CLOSURES

The Fire Department Inspector shall witness item numbers 4 - 6.

1. All in place storage tank closures must be approved by the Building Department before applying to the Fire Department or a sealed drawing, stamped by a Professional Engineer, may be submitted. The drawing must show the location of the tank in plan view and in cross section. The drawing must show the angle (in degrees) from the closest footing of the permanent structure to the closest part of the tank system.
2. Items 1-7 as described for Condition A, shall be followed as applicable.
3. All residual liquids, solids, or sludges, shall be removed and handled as a hazardous waste or recyclable materials in accordance with Chapters 6.5 and 6.7 of the Health and Safety Code.
4. A Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional shall monitor the tank interior and exterior for potential harmful vapors. LEL must be below 10%.
5. The tank shall be completely filled with an inert solid. Cement slurry is acceptable. Sand or water is not. Alternative proposals must be submitted in writing and are subject to Fire Department approval.
6. Each tank will be allotted a maximum of one hour for filling of the tank and soil sampling. Closure periods which exceed this time frame, are subject to the fire inspector's schedule and will be charged at the Fire Department hourly inspection rate.
7. Soil samples shall be taken as listed on the Soil Sampling Requirements form in the Application for Storage Tank Closure.
8. All Closure Report Requirements must be submitted to the Fire Department within 30 days from the sampling date or 180 days from the date of the permit, whichever is earlier.

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## CONDITION D

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### TEMPORARY STORAGE TANK CLOSURES

The Fire Department Inspector shall witness items 2 – 5.

1. Items 2 and 3 as described in Condition C, shall be followed as applicable.
2. The Fire Department shall witness verification that the tank is empty. This may be done by dip sticking the tank. Afterward, the storage tank may be filled with a non-corrosive liquid that is not a hazardous substance. Proof of compatibility of the liquid with the tank must be submitted to the Santa Fe Springs Fire Department.
3. Except for required venting, all fill and access locations and piping shall be sealed using locking caps or concrete plugs.
4. Power service shall be disconnected from all pumps associated with the use of the storage tank unless the power services some other equipment which is not being closed, such as an impressed-current cathodic protection system.
5. Monitoring shall continue pursuant to the permit during the temporary closure, unless determined otherwise by the Fire Department.
6. The storage tank shall be inspected every 3 months by the owner or operator to verify temporary closure requirements are still in place.
7. Temporary closure permits are valid for six months from the date of approval. The tank must be removed, closed in place, or put back into use. If the tank is reused, it must meet the requirements of the Uniform Fire Code, Article 3 or 6 of Title 23 of the California Code of Regulations, Division 3, Chapter 16, and Health and Safety Code Ch. 6.7.

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## CONDITION E

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### WELL ABANDONMENTS

1. All abandoned wells shall be destroyed in such a way that they will not produce water or act as a channel for interchange of water, when such interchange may result in deterioration of the quality of water in any or all water bearing formations penetrated, or present a hazard to the safety and well being of people and animals.
2. A well destruction permit issued by the Los Angeles Department of Health Services shall be required for all wells requiring a permit for their initial construction.
3. Well destruction shall be accomplished according to methods described in the latest "Water Well Standards: State of California" by the Department of Water Resources, contained in bulletin 74-81, December 1981, or any other methods that will provide equivalent or better protection.
4. Verification of well abandonment may be submitted in writing or by requesting a Fire Department inspection.

## CLOSURE REPORT REQUIREMENTS

1. A closure report for storage tanks shall be submitted to the Santa Fe Springs Fire Department containing the items listed below. All closure report requirements must be submitted to the Fire Department within 30 days from the sampling date or 180 days from the data of this permit, whichever is earlier.
2. Site address of tank closure location.
3. Plot plan to scale showing the location of tanks, sampling points, buildings, adjacent streets, and a north arrow. Use a legend to identify tank size and past contents.
4. Description of methods for obtaining, handling, and transporting samples.
5. Time and date samples were obtained.
6. Soil sampling certification (including but not limited to soils classification, boring logs, sample procedures, sample locations, initiating chain of custody, and groundwater location) for tank closure shall be certified by a California Registered Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils. The certification must clearly state that all work was done under the supervision of the person signing.
7. Chain of custody documentation initiated by the person obtaining samples through the person at a Cal/EPA Department of Toxic Substances Control certified laboratory.
8. Copy of "clean" closure certification signed by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional.
9. Copy of Santa Fe Springs Building Department permit. This is required on all underground tank closures and some aboveground tank closures.
10. Disposal destination of tanks and legal evidence of disposal. Include copy of the Storage Tank Closure Certification form if tanks were removed as hazardous waste.
11. Disposal documentation, such as manifests, signed by the receiving facility, for the disposal of any removed soil, tank rinseate, and/or remaining tank contents. Records shall also include a proper waste determination for all waste material related to the removal of the tank(s).
12. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, method of extraction, and method of analysis.
13. Documentation as to depths of groundwater at facility.
14. Any observations of site contamination.
15. Remedial action plan to mitigate contamination.
16. Report to be signed by a California Registered Geologist, a California Certified Engineering Geologist, or a California Registered Civil Engineer with sufficient experience in soils.





City of Santa Fe Springs • Certified Unified Program Agency  
STORAGE TANK CLOSURE CERTIFICATION

PAGE \_\_\_ OF \_\_\_

**I. FACILITY IDENTIFICATION**

FACILITY NAME		3	FACILITY ID #		1		
TANK OWNER NAME (Print First Name, Last Name)						500	
TANK OWNER ADDRESS		501	CITY	502	STATE 503	ZIP CODE	504

**II. TANK CLOSURE INFORMATION**

TANK INTERIOR ATMOSPHERE READINGS	TANK # (State Tank ID#, if applicable)	FLAMMABLE VAPOR			OXYGEN		
		TOP	MIDDLE	BOTTOM	TOP	MIDDLE	BOTTOM

**III. CERTIFICATION**

On examination of the tank, I certify the tank is visually free from product, sludge, rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

CERTIFIER SIGNATURE		STATUS OR AFFILIATION OF CERTIFYING PERSON		505
CERTIFIER (Print First Name, Last Name )		506	Tanks must be certified by one of the following (if other than a CMC, certification must be in appropriate discipline):  <input type="checkbox"/> Certified Industrial Hygienist (CIH)  <input type="checkbox"/> Certified Safety Professional (CSP)  <input type="checkbox"/> Certified Marine Chemist (CMC)	
CERTIFIED TITLE		507		
ADDRESS				
CITY				
STATE				
CERTIFICATION DATE		508	CERTIFICATION TIME	

☐ YES ☐ NO This tank previously held flammable or combustible materials. Atmosphere should be re-checked prior to any work being conducted on the tank.

A copy of this certificate shall accompany the tank to the recycling/disposal facility.

**OFFICIAL USE ONLY**

RECEIVED	REVIEWED BY	COMMENTS
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**INSTRUCTIONS FOR COMPLETION OF THE CONSOLIDATED PERMIT APPLICATION PACKAGE**  
**TANK CLOSURE CERTIFICATION INFORMATION**

The owner or operator of the tank system shall notify the CUPA in writing of the information contained in this form prior to initiating cleaning, cutting, dismantling, or excavation of a tank system that meets the conditions below.

1. This form applies to any tank system that previously held a hazardous material or a hazardous waste, that is identified as a hazardous waste or that is destined to be disposed, reclaimed or closed in place.

2. The requirements of this chapter do not apply to tank systems regulated under a hazardous waste facility permit, other than a permit by rule, or to tank systems regulated under a grant of interim status, nor to a tank system or any portion thereof that meets the definition of scrap metal in section 66260.10 and is excluded from regulation pursuant to section 66261.6(a)(3)(B).

3. **FACILITY ID NUMBER** Enter your Facility ID number, if known. Otherwise, leave this blank. This number is assigned by the Santa Fe Springs Fire Department. This is the unique number which identifies your facility.

4. **BUSINESS NAME** Enter the full legal name of the business.

500. **TANK OWNER NAME** Complete items 500-504 in this section, unless all items are the same as the Business Owner/Operator Identification Section, Owner Information. If the same, write "SAME AS SITE" across this section.

501. **TANK OWNER SITE ADDRESS**

502. **TANK OWNER SITE CITY**

503. **TANK OWNER SITE STATE**

504. **TANK OWNER SITE ZIP**

**TANK INTERIOR ATMOSPHERE READINGS** List the interior flammable vapor and oxygen levels for each tank being closed.

505. **CERTIFYING PERSON ORGANIZATION** Check the appropriate box to indicate the organization to which the certifying person belongs.

506. **CERTIFIER** The name of the certifying person.

507. **CERTIFIER TITLE** Print title of the person certifying the form.

508. **CERTIFICATION DATE** Enter the date that the document was signed. (YYYYMMDD)

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## NOTICE TO CLOSURE PERMIT APPLICANTS

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The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 6, 1988.

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

- Notify the SCAQMD Executive Officer by telephone at (310) 403-6000 24 hours prior to tank excavation. 1166 (c) (1) (A)
- Monitor the excavated material during the excavation for VOC contamination. 1166 (C) (1) (B)
- When VOC contamination is detected:
  - Cease excavation
  - Cover the contaminated soil until implementation of approved mitigation measures. 1166 (c) (1) (C)
  - Notify the SCAQMD Executive Officer at (714) 396-2000 within 24 hours of detection of VOC contaminated soil. 1166 9 (c) (2) (A)
- A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation or VOC to the atmosphere. 1166 (c) (3)

## EXEMPTIONS

- Treatment of less than one (1) cubic yard of contaminated soil. 1166 (d) (1) (A)
- Decontamination of soil containing organic compounds that have initial boiling point of 302 ° F or greater, Reid Vapor Pressure less than 80 mm Hg or Absolute Vapor Pressure less than 36 mm Hg at 20 ° C. 1166 (d) (1) (B). (F)
- Removal of soil for sampling purposes pursuant to EPA methods. 1166 (d) (1) (C)
- Accidental spillage of five (5) gallons or less of VOC. 1166 (d) (1) (D)
- Documentation of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 166 (d) (1) (E)

**SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT (909) 396-2000**



## REVISED SAMPLING PLAN INDUSTRIAL WASTEWATER UNIT

Two samples will be collected from beneath each of the three stages of the industrial wastewater system (the first stage metal aboveground tank, the second stage belowground sump, and the third stage clarifier). Samples will be collected as shown on Figure 1 at depths of approximately 2 feet below the bottom of the excavation. Soil samples will be analyzed as per the General Work Plan. Soil samples will also be collected at approximately 20-foot intervals along the underground piping run associated with the industrial wastewater unit. Figure 1 shows the estimated location of the piping run and the sampling locations. These samples will be analyzed as per the General Work Plan.

The work is tentatively scheduled for October 18 through 22, 2004. Prior to beginning the work, the SFSFD will be notified. If you have any questions or comments regarding this addendum, please call the undersigned at your convenience.

Sincerely,  
**NINYO & MOORE**



Paul A. Roberts, R.G., R.E.A. I/II  
Senior Environmental Geologist

PAR/emp

Attachment: Figure 1 – Proposed Sample Location Map

Distribution: (1) Addressee  
(1) Mr. Patrick Russell, Bloomfield Partners II, LLC  
(1) Pam Andes, Esq., Allen Matkins Leck Gamble & Mallory LLP

September 21, 2004  
Project No. 205372005

Mr. Tom Hall  
Santa Fe Spring Fire Department  
11300 Greenstone Avenue  
Santa Fe Springs, California 90670

Subject: General Work Plan to Close Aboveground Storage Tanks  
and Industrial Wastewater Unit  
Bloomfield II Property  
Plegel Oil Company Lease  
Santa Fe Springs, California

Dear Mr. Hall:

This work plan presents the scope of work and schedule to close the four aboveground storage tanks (ASTs) and the industrial wastewater unit at the Plegel Oil Company Lease property (referred to as the Plegel lease property or the site) located in the northwestern corner of the Bloomfield II Property in Santa Fe Springs, California (Figures 1 and 2). Bloomfield Partners II, LLC, recently purchased the larger Bloomfield II Property and the Plegel lease property for redevelopment as commercial property.

## BACKGROUND

The site and Bloomfield II Property have been used as oil production from at least 1923 through the time of this report. Oil wells on the Bloomfield II Property have recently been reabandoned in preparation of the redevelopment of the property. The site was used by Plegel Oil Company for the production and storage of crude oil. Based on groundwater wells located on the Bloomfield II Property, groundwater has been measured at depths of approximately 95 feet below the ground surface (bgs).

The site currently contains an active oil well (Hathaway Company "Baker" 27), a decommissioned and abandoned oil well (Texaco, Inc., "SFS" 5), three small ASTs (two containing crude

oil and one empty), an older oil/water separator, a newer oil/water separator, two wastewater separators, a clarifier, and two roll-off storage containers (Figure 3). Crude oil is pumped from "Baker" 27 and piped to the newer oil/water separator. The older oil/water separator was recently taken off line (approximately one month ago) and replaced with the newer oil/water separator (Plegel, 2004). Oil from the separator is pumped into the two ASTs for storage. The ASTs are relatively small, holding approximately 250 barrels of crude oil each (or approximately 10,500 gallons per AST). According to Mr. Wayne Plegel, owner of Plegel Oil Company, the empty AST has never stored hazardous materials on site. As per the request of Mr. Tom Hall of the Santa Fe Springs Fire Department (SFSFD), Ninyo & Moore obtained a signed letter from Mr. Plegel documenting this statement; a copy is provided in Attachment A. Based on this information, four ASTs will be closed through the City of Santa Fe Springs. The ASTs to be closed include the two crude oil tanks, the older oil/water separator, and the newer oil/water separator.

The wastewater generated from the pumping process is diverted through a three stage wastewater system that clarifies the water before it is discharged to the city storm drain. The first stage of the wastewater system is a metal aboveground tank (referred to as the first stage wastewater separator on Figure 3). The second stage consists of a concrete lined, belowground sump (referred to as the second stage wastewater separator on Figure 3). The third stage of the wastewater treatment unit is the clarifier located north of the crude oil ASTs (Figure 3). Based on this information, one industrial wastewater unit will be closed through the City of Santa Fe Springs. The industrial wastewater unit includes the first stage wastewater separator, the second stage wastewater separator, and the clarifier.

As part of the real estate due diligence, in December 2003 and January 2004, Bloomfield Partners II, LLC, retained Ninyo & Moore to conduct a subsurface investigation in the vicinity of the ASTs and wastewater treatment area. As presented on Figure 3, Ninyo & Moore advanced ~~14 soil borings to depths of up to 65 feet bgs~~. Laboratory results indicated concentrations of petroleum hydrocarbons and lead that exceeded the Santa Fe Springs Fire Department (SFSFD) ~~Draft~~ Soil Assessment and Remediation Guidelines for Commercial/Industrial Sites, "Draft 64" (referred to herein as the "SFSFD guidelines"). Ninyo & Moore prepared and submitted a report dated Feb-

ruary 13, 2004, to the SFSFD documenting these findings. Ninyo & Moore has also prepared a Soil Management Plan (SMP) dated June 17, 2004, that outlines the scope of work to investigate and remediate "unknown environmental features" that might be encountered during grading activities. The SMP was reviewed and approved by the SFSFD on June 29, 2004.

On September 10, 2004, Ninyo & Moore met with Mr. Hall to discuss the proposed scope of work to close the subject ASTs and industrial wastewater unit. Because impacted soil is known to exist, it was agreed upon by Ninyo & Moore and the SFSFD that closure procedures would be completed including the collection of confirmation soil samples, following which, all of the laboratory data would be evaluated and a closure report and Remedial Action Plan (RAP) would be prepared.

## OBJECTIVE

The objective of the work presented herein is to close the ASTs and industrial wastewater unit in accordance with current regulatory guidelines.

## SCOPE OF SERVICES

Ninyo & Moore's proposed scope of work will include the following:

- **Task 1: Obtain Permits** – As part of this work plan, Ninyo & Moore has submitted the Application for Storage Tank Closure and Industrial Waste Application for Closure to the SFSFD, along with the appropriate fees. Following approval of these applications, Ninyo & Moore will obtain a sewer/plumbing permit from the Santa Fe Springs Building and Safety Department (SFSBD).
- **Task 2: Health and Safety Plan** – The Health and safety Plan presented in the SMP dated June 17, 2004, will be used during the closure activities presented herein.
- **Task 3: Decommissioning and Closure of ASTs and Industrial Wastewater Unit** – Bloomfield Partners II, LLC, will retain a state-licensed contractor to decommission and close the ASTs and industrial wastewater unit. Prior to beginning work, the SFSFD, SFSBD, and South Coast Air Quality Management District (SCAQMD) will be notified. All liquids will be removed from the ASTs and industrial wastewater units and the features will be triple rinsed. Residue, liquids and rinseate will be transported with manifests to a state-licensed off-



site recycling facility. Each tank will then be certified by a Certified Marine Chemist, Certified Industrial Hygienist, or Certified Safety Professional as "clean" and vapor free. The ASTs and industrial wastewater unit will then be demolished and removed from the site as construction debris. On-site pipelines associated with the ASTs and industrial wastewater unit will be removed. The outlet pipeline will be severed at or near the property line and will be capped with fast-setting cement or other approved equivalent material.

- Handwritten notes on left margin:*  
- 2 Pipelines? (with arrow pointing to Task 4)  
- samples below  
- 3 samples  
- Both
- Task 4: Confirmation Sampling** – Confirmation sampling will be conducted with the oversight of a California Registered Geologist from Ninyo & Moore. One sample will be collected beneath each of the four ASTs: the two crude oil ASTs, the older oil/water separator, and the newer oil/water separator, and each of the wastewater separators (i.e., the first stage wastewater separator, the second stage wastewater separator, and the clarifier). Soil samples will also be collected along pipeline lines at approximately 29-foot intervals. The exact location of the pipelines are unknown at this time, however, it is assumed that underground pipelines exist between the active oil well and the newer oil/water separator; from the newer oil/water separator to the first stage wastewater separator; from the second stage wastewater separator to the clarifier; and from the crude oil ASTs to a truck valve located immediately south of the Plegel lease property. ~~Underground pipelines discovered during the demolition activities will be accurately mapped by Ninyo & Moore.~~ Soil samples will be collected from the backhoe bucket at depths of approximately 2 feet below the bottom of each feature. Samples will be collected in laboratory supplied glass jars and in accordance with EPA Method No. 5035. Field procedures are presented in Attachment B.
  - Task 5: Laboratory Analyses** – Soil samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbon carbon chain C<sub>10</sub>-C<sub>32</sub> (TPHcc), volatile organic compounds (VOCs), polynuclear aromatics (PNAs), and Title 22 metals in general accordance with EPA Method Nos. 8015 (modified), 8260B, 8270C, and 6010/7000 series.
  - Task 6: Closure Report and Remedial Action Plan** – Following receipt of the laboratory reports, an AST/Industrial Wastewater Unit Closure Report and RAP will be prepared that will document the decommissioning and closure of the ASTs and industrial wastewater unit, laboratory results, and the remedial action for mitigating on-site soils.

## SCHEDULE

Following approval of the work plan, Tasks 3 through 5 will be completed in approximately three to four weeks. The closure report and RAP will be submitted to the SFSFD for review approximately four weeks following removal activities.

Plegel Oil Company Lease  
Santa Fe Springs, California

September 21, 2004  
Project No. 205372005

If you have any questions or comments regarding this work plan, please call the undersigned at your convenience.

Sincerely,  
**NINYO & MOORE**



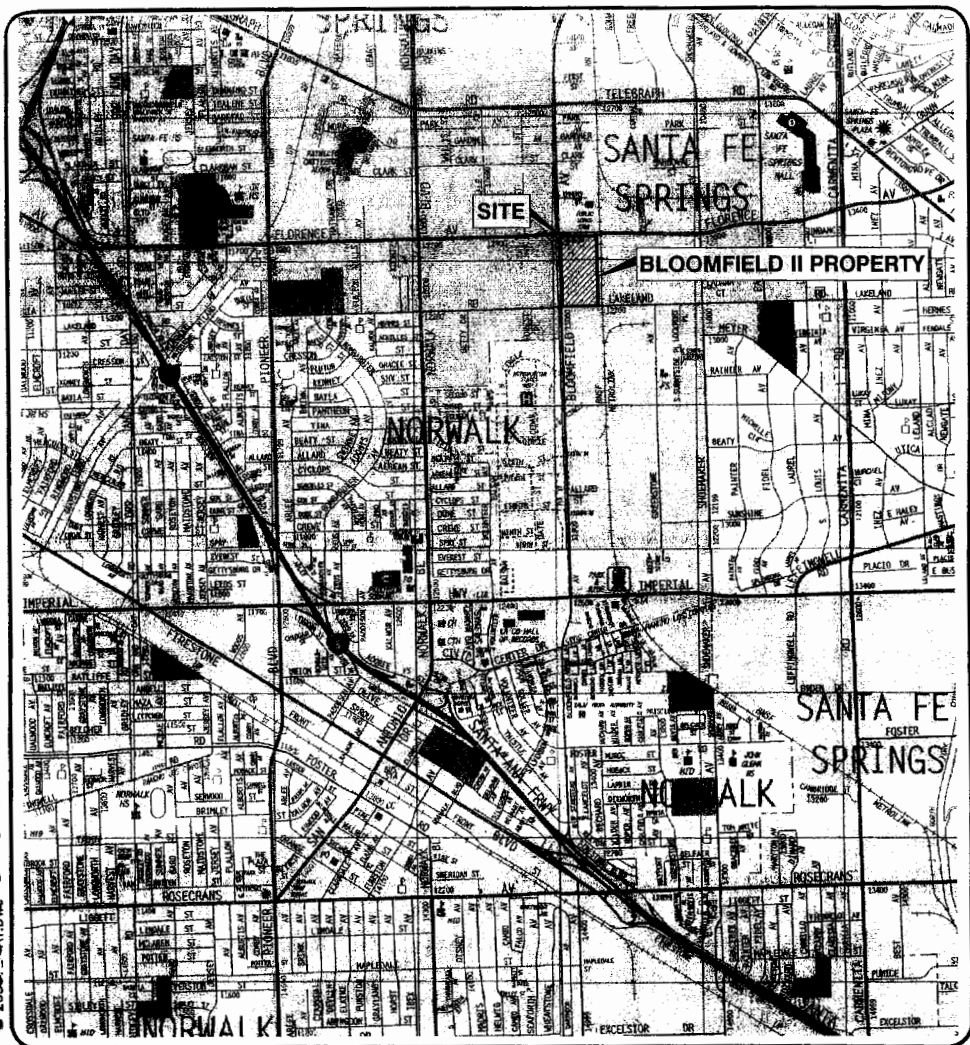
Paul A. Roberts, R.G., R.E.A. I/II  
Senior Environmental Geologist



PAR/emp

Attachments: Figure 1 – Site Location Map  
Figure 2 – Site Plan  
Figure 3 – Soil Boring Location Map  
Attachment A – Copy of Signed Statement by Mr. Wayne Plegel  
Attachment B – Field Procedures

Distribution: (1) Addressee  
(2) Mr. Patrick Russell, Bloomfield Partners II, LLC  
(1) Pam Andes, Esq., Allen Matkins Leck Gamble & Mallory LLP



REFERENCE: 2000 THOMAS GUIDE FOR LOS ANGELES AND ORANGE COUNTIES, STREET GUIDE AND DIRECTORY.



0 2400 4800  
APPROXIMATE SCALE IN FEET

### SITE LOCATION MAP

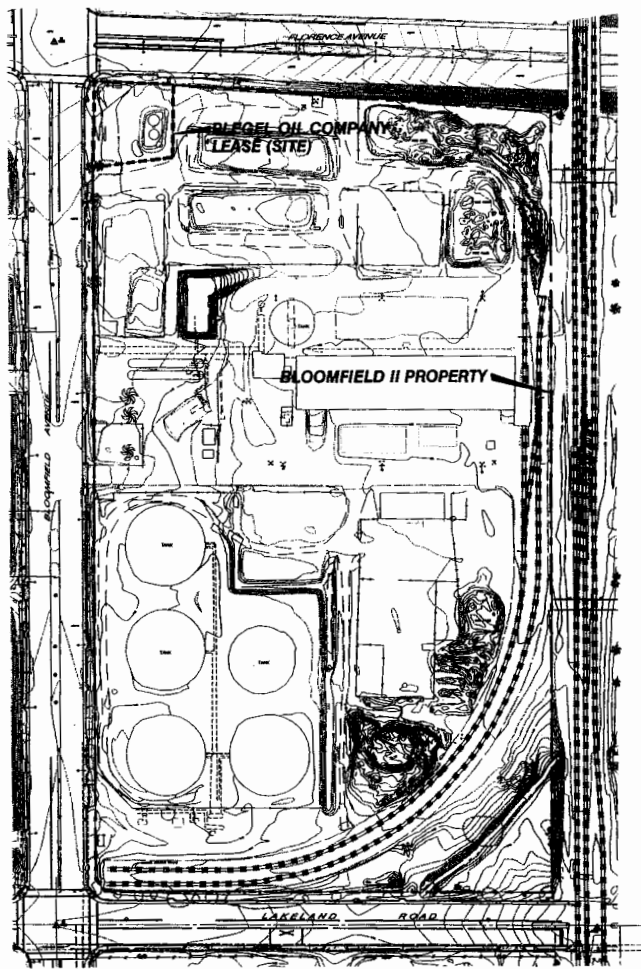
BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

**Ningo & Moore**

PROJECT NO.

DATE

FIGURE



#### LEGEND

- BLOOMFIELD II PROPERTY BOUNDARY
- PLEGEL OIL COMPANY LEASE

0 200 400

APPROXIMATE SCALE IN FEET

REFERENCE: BASE MAP PROVIDED BY THEMES ENGINEERING.

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

#### SITE PLAN

BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO.

205372005

DATE

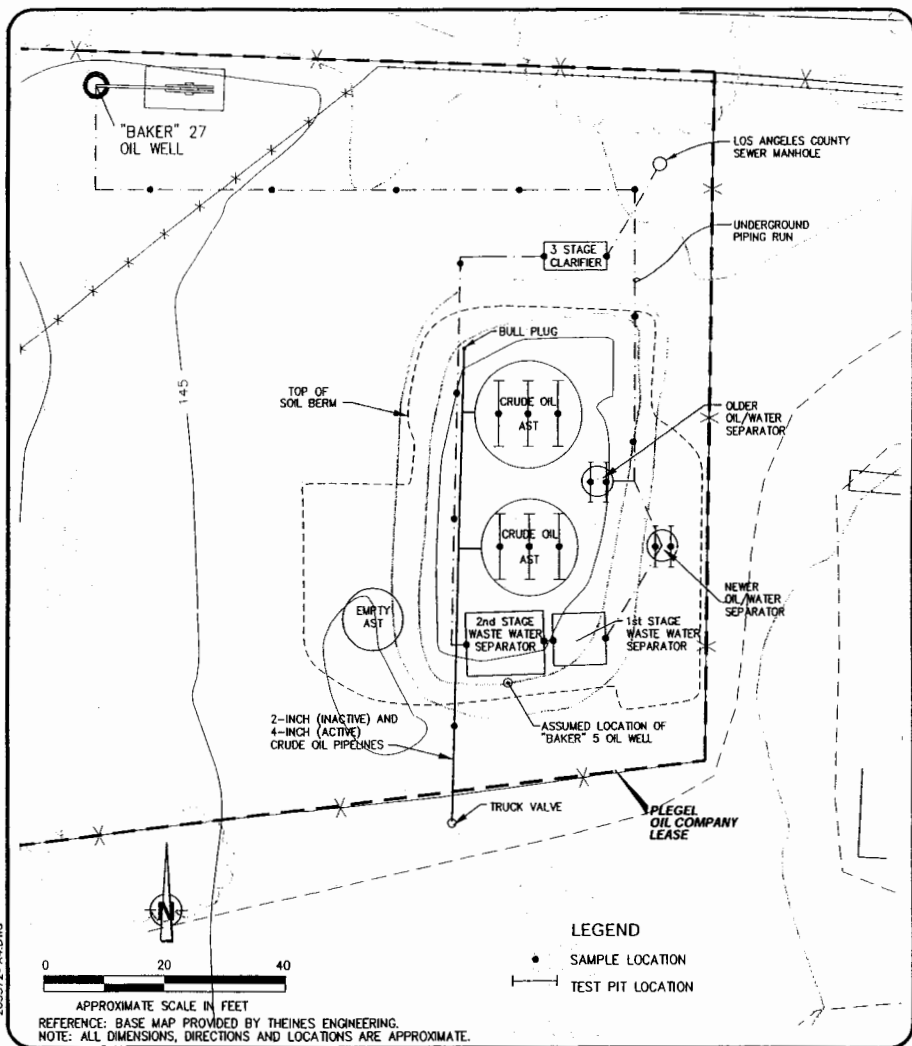
9/2004

FIGURE

2

**Ninyo & Moore**

205372-44.DWG



**Ningo & Moore**

### PROPOSED SAMPLE LOCATION MAP

BLOOMFIELD II PROPERTY  
10806 BLOOMFIELD AVENUE  
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO.

205372005

DATE

10/2004

FIGURE

1

Plegel Oil Company Lease  
Santa Fe Springs, California

September 21, 2004  
Project No. 205372005

---

**ATTACHMENT A**

**COPY OF SIGNED STATEMENT BY MR. WAYNE PLEGEL**

# Ninyo & Moore

Geotechnical and Environmental Sciences Consultants

September 13, 2004  
Project No. 205372004

Mr. Wayne Plegel  
Plegel Oil Company  
17052 Cascades Avenue  
Yorba Linda, California 92886

Subject: Documentation of Telephone Conversation  
Bloomfield II Property  
Plegel Oil Company Lease  
Santa Fe Springs, California

Dear Mr. Plegel:

This letter documents our telephone conversation we had this afternoon. As we discussed, Ninyo & Moore has been retained by Bloomfield II Partners, LLC to remove the aboveground storage tanks (ASTs) and wastewater treatment unit at the above-referenced property (site). As part of this process, we are preparing the closure applications and associated fees. As you stated during our conversation, to the best of your knowledge, the empty AST located on the western portion of the bermed area has never contained liquids, hazardous materials, or other substances since it was installed on the subject site. Please verify this statement by signing below. Ninyo & Moore will present this letter to the Santa Fe Springs Fire Department who will exempt the subject AST from the Aboveground Storage Tank Closure Permit application. If there are any questions, please feel free to call me at 949-753-7070.

Sincerely,

**NINYO & MOORE**



Paul A. Roberts, R.G., R.E.A. I/II  
Senior Environmental Geologist

PAR

Distribution: (1) Addressee  
(1) Mr. Patrick Russell, Bloomfield Partners, LLC

Verify AST Usage:

  
Signature: Wayne Plegel

9/14/2004  
Date

Plegel Oil Company Lease  
Santa Fe Springs, California

September 21, 2004  
Project No. 205372005

---

**ATTACHMENT B**  
**FIELD PROCEDURES**



## FIELD PROCEDURES

### Confirmation Sampling

1. Bloomfield Partners II, LLC, will retain a State-licensed contractor to close the aboveground storage tanks (ASTs) and industrial wastewater unit, and excavate test pits for the collection of confirmation soil samples. The operator will be HAZWOPER 40-hour trained.
2. Ambient air quality within the work zone will be monitored for potentially hazardous materials (e.g., volatile organic compounds [VOCs]) using an organic vapor analyzer (OVA), or equivalent equipment calibrated to meet the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1166.
3. Soil samples will be collected using laboratory supplied glass jars. The samples will be collected from the bucket of the backhoe. The samples collected for the analyses of VOCs and total petroleum hydrocarbons as gasoline (TPHg) will be collected in general accordance with EPA Method No. 5035.
4. The samples retained for chemical analyses will be placed in zip-lock bags and stored in an ice chest cooled, using ice, to a temperature of approximately 40 degrees Fahrenheit.
5. Soil samples will be delivered to a state-certified laboratory within 24 hours after collection. Sample handling, transport, and delivery to the laboratory will be documented using chain-of-custody procedures, including the use of chain-of-custody forms.

12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

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## **APPENDIX B**

### **NON-HAZARDOUS WASTE MANIFESTS**



# TMG TRANSPORTATION, INC.

1516 Beechwood Avenue • Fullerton, CA 92835

Ph: (714) 822-5438 Fax: (714) 256-0822

No 1167

## NON-HAZARDOUS WASTE DATA FORM

NAME PLEGEL OIL Co/Sanis Regis EPA I.D. NO.

ADDRESS Baker Tank Farm

CITY, STATE, ZIP Santa Fe Springs 90670 PHONE NO 714, 572 3571

CONTAINERS: NO. 1 VOLUME 100 BBL WEIGHT \_\_\_\_\_

TYPE ☒ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER \_\_\_\_\_

WASTE DESCRIPTION TANK Bottoms GENERATING PROCESS AL Production

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>TANK Bottoms</u>		<u>100</u>	5. _____		
2. _____			6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH 7 ☐ SOLID ☐ LIQUID ☒ SLUDGE ☐ SLURRY ☐ OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Wear Goggles & Gloves

THE GENERATOR CERTIFIES THAT  
 THE WASTE AS DESCRIBED IS 100%  
 NON-HAZARDOUS

LD/M. Sent 11/22/04  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

NAME TMG TRANSPORTATION, INC. EPA I.D. NO.

ADDRESS 1516 BEECHWOOD AVENUE SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP FULLERTON, CA 92835 PICK UP DATE \_\_\_\_\_

PHONE NO. (714) 822-5438

TRUCK UNIT I.D. NO. 125 LDh 11/22/04  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

NAME ANTERRA EPA I.D. NO.

DISPOSAL METHOD ☐ LANDFILL ☐ OTHER \_\_\_\_\_

ADDRESS 1933 E Woodley Rd

CITY, STATE, ZIP Oxnard Ca 93030

PHONE NO. 805 240 4646

David S. Smith 11-22-04  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L A	TONS
TRANS		S B	
CIQ		RTCD	WWT NONE

DISCREPANCY Tank Bottoms  
oil/waxie  
FWWV NO  
WASH OUT.

TO BE COMPLETED BY GENERATOR

TRANSPORTER

RECEIVED



# TMG TRANSPORTATION, INC.

1516 Beechwood Avenue • Fullerton, CA 92835

Ph: (714) 822-5438 Fax: (714) 256-0822

№ 1168

## NON-HAZARDOUS WASTE DATA FORM

NAME SARI'S RESIS / PLAGEL OIL EPA I.D. NO.

ADDRESS 18802 Bidine AV

CITY, STATE, ZIP IRVINE CA 92612 PHONE NO. 714 522-3571

CONTAINERS: NO. 1 VOLUME 100 BBL WEIGHT \_\_\_\_\_

TYPE ☒ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER \_\_\_\_\_

WASTE DESCRIPTION TANK BOTTOMS GENERATING PROCESS Oil Production

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>TANK BOTTOMS</u>		<u>100</u>	6. _____		
2. _____			8. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH 2 ☐ SOLID ☐ LIQUID ☒ SLUDGE ☐ SLURRY ☐ OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Safety Glasses & Gloves

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS

David Green TYPED OR PRINTED FULL NAME & SIGNATURE DATE 11/23/04

NAME TMG TRANSPORTATION, INC. EPA I.D. NO.

ADDRESS 1516 BEECHWOOD AVENUE SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP FULLERTON, CA 92835 PICK UP DATE 11/23/04

PHONE NO. (714) 822-5438

TRUCK UNIT I.D. NO. 125 David Green TYPED OR PRINTED FULL NAME & SIGNATURE DATE 11/23/04

NAME ANTERRA EPA I.D. NO.

ADDRESS 1933 E Wodley Rd DISPOSAL METHOD ☐ LANDFILL ☐ OTHER \_\_\_\_\_

CITY, STATE, ZIP Oxnard CA 93030

PHONE NO. 805 240-4646

David Smogras TYPED OR PRINTED FULL NAME & SIGNATURE DATE 11-23-04

NO wash out DATE oil water sludge.

GEN	OLD/NEW	L A	TONS
TRANS		S B	
C/Q		RTICD	W/OFF NONE

DISCREPANCY \_\_\_\_\_

TO BE COMPLETED BY GENERATOR

TRANSPORTER

TSPACIFIC



## TMG TRANSPORTATION, INC.

1516 Beechwood Avenue • Fullerton, CA 92835

Ph: (714) 822-5438 Fax: (714) 256-0822

No 1169

## NON-HAZARDOUS WASTE DATA FORM

NAME SARIS REGIS / PLUGEL OIL EPA I.D. NO.

ADDRESS 8802 BIRCHING AV

CITY, STATE, ZIP IRVINE CA 92612 PHONE NO 714.572.3521

CONTAINERS: NO. 1VOLUME 100 BBL

WEIGHT \_\_\_\_\_

TYPE ☒ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER \_\_\_\_\_WASTE DESCRIPTION Tank BottomsGENERATING PROCESS Oil Production

COMPONENTS OF WASTE

PPM

%

1. Tank Bottoms \_\_\_\_\_ 100

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

COMPONENTS OF WASTE

PPM

%

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

PROPERTIES: pH 2 ☐ SOLID ☐ LIQUID ☒ SLUDGE ☐ SLURRY ☐ OTHER \_\_\_\_\_HANDLING INSTRUCTIONS: Safety Glasses & Gloves

THE GENERATOR CERTIFIES THAT  
THE WASTE AS DESCRIBED IS 100%  
NON-HAZARDOUS

LUTHER D. Green Agent 11/24/04  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

NAME TMG TRANSPORTATION, INC.EPA I.D. NO. ADDRESS 1516 BEECHWOOD AVENUE

SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP FULLERTON, CA 92835

PICK UP DATE \_\_\_\_\_

PHONE NO. (714) 822-5438TRUCK UNIT I.D. NO. 125

LUTHER D. Green 11/24/04  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

NAME ANTERRAEPA I.D. NO. 

DISPOSAL METHOD

ADDRESS 1933 E WOOLEY RD☐ LANDFILL ☐ OTHER \_\_\_\_\_CITY, STATE, ZIP Orange CA 92630PHONE NO. 805-240-4646

RANDY R. Rasmussen 11/24/04  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
CO		RTCD		

DISCREPANCY



# TMG TRANSPORTATION, INC.

1516 Beechwood Avenue • Fullerton, CA 92835

Ph: (714) 822-5438 Fax: (714) 256-0822

№ 1170

## NON-HAZARDOUS WASTE DATA FORM

NAME SAR'S REGIS "Royal Baker Tank Farm" EPA I.D. NO.                       
 ADDRESS 18802 Bidline Av  
 CITY, STATE, ZIP IRVINE CA 92612 PHONE NO 949.572.3571

CONTAINERS: NO. 1 VOLUME 100 BBL WEIGHT                     

TYPE ☒ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER

WASTE DESCRIPTION TANK BOTTOMS GENERATING PROCESS OL Production

COMPONENTS OF WASTE		PPM	%	COMPONENTS OF WASTE		PPM	%
1.	<u>TANK BOTTOMS</u>		<u>100</u>	5.			
2.				6.			
3.				7.			
4.				8.			

PROPERTIES: pH 2 ☐ SOLID ☐ LIQUID ☒ SLUDGE ☐ SLURRY ☐ OTHER

HANDLING INSTRUCTIONS: SAFETY GLASSES & GLOVES

THE GENERATOR CERTIFIES THAT  
THE WASTE AS DESCRIBED IS 100%  
NON-HAZARDOUS

TYPED OR PRINTED FULL NAME & SIGNATURE Luther D Green AS Agent - RTR

DATE 12/1/04

NAME TMG TRANSPORTATION, INC. EPA I.D. NO.                     

ADDRESS 1516 BEECHWOOD AVENUE SERVICE ORDER NO.                     

CITY, STATE, ZIP FULLERTON, CA 92835 PICK UP DATE                     

PHONE NO. (714) 822-5438

TRUCK UNIT I.D. NO. 125 TYPED OR PRINTED FULL NAME & SIGNATURE Luther D Green DATE 12/1/04

NAME ANTERRA EPA I.D. NO.                     

DISPOSAL METHOD

ADDRESS 1933 E Waverly Rd ☐ LANDFILL ☐ OTHER

CITY, STATE, ZIP OXFORD CA 93030

PHONE NO. 805-240-4646

TYPED OR PRINTED FULL NAME & SIGNATURE David Snodgrass

DATE 12-01-04

GEN	OLD/NEW	L A	TONS
TRANS		S B	
CAQ		RT/CD	HWDF NONE

DISCREPANCY

TO BE COMPLETED BY GENERATOR

TRANSPORTER

TSD FACILITY

Washed at  
thick wax & tank bottoms.

12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

---

**APPENDIX C**  
**TANK CERTIFICATE**



# TANK CERTIFICATION REPORT

TANK REMOVAL CERTIFICATE #: 07462

Date: 11/30/04

Permit #: N/A

Site: Baker Lease

Address of tank: 12668 Florence Ave

Santa Fe Springs

Client: Reliable Equipment

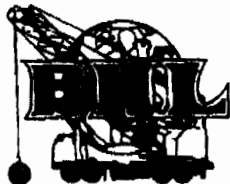
Material	Capacity	Material	Material	Material
Steel AST	250 BBL	N/A	Crude oil	LEL 0%
Steel AST	" "	N/A		LEL 0%
Separator	60 BBL	N/A	Water + crude	LEL 0%

The tank(s) described above has/have been inspected and found to be gas free based on readings obtained with an MSA type 2A Explosivity Meter (LEL of zero percent). A visual inspection has been made of the interior of the tank(s) and no visible contamination has been observed except as noted below.

EXCEPTION: Slight rust/oil residue







# Industries Incorporated

11201 SANTA FE AVENUE - LYNWOOD, CALIFORNIA 90262  
(310) 537-8142 • (323) 321-1710 • (310) 635-9942 FAX

February 3, 2004

Reliable Equipment Rental, Inc.  
8331 Commonwealth Ave.  
Buena Park, CA 90621

Subject: Certificate of Destruction

This letter will serve as the Certificate of Destruction for the tanks, vessels, and piping removed by BHL for Reliable Equipment Rental at the Plegel Yard located on the corner of Florence and Bloomfield Santa Fe Springs, CA.

Material was sent to the following recycling facility: Hugo Neu Proler 901 New Dock Street Terminal Island, CA for remelting purposes only.

If you require any additional information please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stuart H. Lipsett', written over a horizontal line.

Stuart H. Lipsett  
President

12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

---

**APPENDIX D**  
**SAMPLING PROCEDURES**

## **SAMPLING PROCEDURES**

### **Soil Sampling Procedures**

1. Discrete, relatively undisturbed soil samples were collected from the backhoe bucket and from the excavated stockpiled soil. Samples to be chemically analyzed for total petroleum hydrocarbons as gasoline (TPHg) and volatile organic compounds (VOCs) were collected in general accordance with EPA Method No. 5035. A plastic syringe was used to collect approximately 5 grams of soil from the backhoe bucket and stockpiled soil. The soil was ejected into a pre-weighed, laboratory supplied, 40-milliliter, volatile organic analysis (VOA) vial containing methanol. Two additional samples weighing approximately 5 grams each were collected using the syringe and ejected into vials containing sodium bisulfate. A new syringe was used for each sampling interval.
2. The samples to be analyzed for the remaining constituents were collected in laboratory supplied 4-ounce, glass jars.
3. The soil samples were placed in sealable plastic bags and stored in an ice chest, which was cooled, using bagged ice, to a temperature of approximately four degrees Celsius.

### **Sample Handling Procedures**

1. The samples were stored in an ice-filled cooler and delivered to an off-site state-certified laboratory following termination of field activities. Sample handling, transport, and delivery to the laboratory were documented using appropriate chain-of-custody protocol, including the use of chain-of-custody forms.

12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

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**APPENDIX E**  
**LABORATORY REPORTS**

December 08, 2004



Paul Roberts  
Ninyo & Moore  
475 Goddard Suite 200  
Irvine, CA 92618

ELAP No.: 1838  
NELAP No.: 02107CA  
CSDLAC No.: 10196

TEL: (949) 697-2198  
FAX: (949) 753-7071

Workorder No.: 072617

RE: Bloomfield II, 205372005

Attention: Paul Roberts

Enclosed are the results for sample(s) received on November 30, 2004 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in cursive script, appearing to read "Eddie F. Rodriguez".

Eddie F. Rodriguez  
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.



## Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Project: Bloomfield II, 205372005  
Lab Order: 072617

### CASE NARRATIVE

All volatile analyses were performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Analytical Comments for EPA 8270

The following samples were diluted due to sample matrix:

072617-001G  
072617-004G  
072617-007G  
072617-010G



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore

Client Sample ID: T1-1-2

Lab Order: 072617

Project: Bloomfield II, 205372005

Collection Date: 11/30/2004

Lab ID: 072617-001

Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
---------	--------	-----	------	-------	----	---------------

## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	2.1	1.0	mg/Kg	1	12/6/2004
Barium	42	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	6.8	1.0	mg/Kg	1	12/6/2004
Cobalt	3.4	1.0	mg/Kg	1	12/6/2004
Copper	7.5	1.0	mg/Kg	1	12/6/2004
Lead	2.3	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	5.8	1.0	mg/Kg	1	12/6/2004
Selenium	ND	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	12	1.0	mg/Kg	1	12/6/2004
Zinc	15	1.0	mg/Kg	1	12/6/2004

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	2600	200	mg/Kg	20	12/5/2004
T/R Hydrocarbons: C10-C12	840	200	mg/Kg	20	12/5/2004
T/R Hydrocarbons: C13-C15	1900	200	mg/Kg	20	12/5/2004
T/R Hydrocarbons: C16-C22	5000	200	mg/Kg	20	12/5/2004
T/R Hydrocarbons: C23-C32	6700	200	mg/Kg	20	12/5/2004

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_041201A	QC Batch: E04VS342	PrepDate: 11/30/2004	Analyst: JV		
GRO	41	1.2	mg/Kg	1	12/1/2004

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

DO - Surrogate Diluted Out

H - Samples exceeding holding time

Page 1 of 32

Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-001

Client Sample ID: T1-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
---------	--------	-----	------	-------	----	---------------

## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	250	µg/Kg	50	12/1/2004
1,1,1-Trichloroethane	ND	250	µg/Kg	50	12/1/2004
1,1,2,2-Tetrachloroethane	ND	250	µg/Kg	50	12/1/2004
1,1,2-Trichloroethane	ND	250	µg/Kg	50	12/1/2004
1,1-Dichloroethane	ND	250	µg/Kg	50	12/1/2004
1,1-Dichloroethane	ND	250	µg/Kg	50	12/1/2004
1,1-Dichloropropene	ND	250	µg/Kg	50	12/1/2004
1,2,3-Trichlorobenzene	ND	250	µg/Kg	50	12/1/2004
1,2,3-Trichloropropane	ND	250	µg/Kg	50	12/1/2004
1,2,4-Trichlorobenzene	ND	250	µg/Kg	50	12/1/2004
1,2,4-Trimethylbenzene	ND	250	µg/Kg	50	12/1/2004
1,2-Dibromo-3-chloropropane	ND	500	µg/Kg	50	12/1/2004
1,2-Dibromoethane	ND	250	µg/Kg	50	12/1/2004
1,2-Dichlorobenzene	ND	250	µg/Kg	50	12/1/2004
1,2-Dichloroethane	ND	250	µg/Kg	50	12/1/2004
1,2-Dichloropropane	ND	250	µg/Kg	50	12/1/2004
1,3,5-Trimethylbenzene	ND	250	µg/Kg	50	12/1/2004
1,3-Dichlorobenzene	ND	250	µg/Kg	50	12/1/2004
1,3-Dichloropropane	ND	250	µg/Kg	50	12/1/2004
1,4-Dichlorobenzene	ND	250	µg/Kg	50	12/1/2004
2,2-Dichloropropane	ND	250	µg/Kg	50	12/1/2004
2-Chlorotoluene	ND	250	µg/Kg	50	12/1/2004
4-Chlorotoluene	ND	250	µg/Kg	50	12/1/2004
4-Isopropyltoluene	ND	250	µg/Kg	50	12/1/2004
Benzene	ND	250	µg/Kg	50	12/1/2004
Bromobenzene	ND	250	µg/Kg	50	12/1/2004
Bromodichloromethane	ND	250	µg/Kg	50	12/1/2004
Bromoform	ND	250	µg/Kg	50	12/1/2004
Bromomethane	ND	250	µg/Kg	50	12/1/2004
Carbon tetrachloride	ND	250	µg/Kg	50	12/1/2004
Chlorobenzene	ND	250	µg/Kg	50	12/1/2004
Chloroethane	ND	250	µg/Kg	50	12/1/2004
Chloroform	ND	250	µg/Kg	50	12/1/2004
Chloromethane	ND	250	µg/Kg	50	12/1/2004
cis-1,2-Dichloroethene	ND	250	µg/Kg	50	12/1/2004
cis-1,3-Dichloropropene	ND	250	µg/Kg	50	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-001

**Client Sample ID:** T1-1-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS3_041201A	QC Batch:	R04VS193	PrepDate:	11/30/2004	Analyst:	JPC
Dibromochloromethane	ND	250	µg/Kg	50	12/1/2004		
Dibromomethane	ND	250	µg/Kg	50	12/1/2004		
Dichlorodifluoromethane	ND	250	µg/Kg	50	12/1/2004		
Ethylbenzene	ND	250	µg/Kg	50	12/1/2004		
Hexachlorobutadiene	ND	250	µg/Kg	50	12/1/2004		
Isopropylbenzene	1900	250	µg/Kg	50	12/1/2004		
m,p-Xylene	ND	250	µg/Kg	50	12/1/2004		
Methylene chloride	ND	250	µg/Kg	50	12/1/2004		
n-Butylbenzene	610	250	µg/Kg	50	12/1/2004		
n-Propylbenzene	2800	250	µg/Kg	50	12/1/2004		
Naphthalene	9300	250	µg/Kg	50	12/1/2004		
o-Xylene	ND	250	µg/Kg	50	12/1/2004		
sec-Butylbenzene	1300	250	µg/Kg	50	12/1/2004		
Styrene	ND	250	µg/Kg	50	12/1/2004		
tert-Butylbenzene	ND	250	µg/Kg	50	12/1/2004		
Tetrachloroethene	ND	250	µg/Kg	50	12/1/2004		
Toluene	ND	250	µg/Kg	50	12/1/2004		
trans-1,2-Dichloroethene	ND	250	µg/Kg	50	12/1/2004		
Trichloroethene	ND	250	µg/Kg	50	12/1/2004		
Trichlorofluoromethane	ND	250	µg/Kg	50	12/1/2004		
Vinyl chloride	ND	250	µg/Kg	50	12/1/2004		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID:	MS7_041202A	QC Batch:	20428	PrepDate:	12/2/2004	Analyst:	JWS
2-Methylnaphthalene	ND	33000	µg/Kg	50	12/6/2004		
Acenaphthene	ND	33000	µg/Kg	50	12/6/2004		
Acenaphthylene	ND	33000	µg/Kg	50	12/6/2004		
Anthracene	ND	33000	µg/Kg	50	12/6/2004		
Benzo(a)anthracene	ND	33000	µg/Kg	50	12/6/2004		
Benzo(a)pyrene	ND	33000	µg/Kg	50	12/6/2004		
Benzo(b)fluoranthene	ND	33000	µg/Kg	50	12/6/2004		
Benzo(g,h,i)perylene	ND	33000	µg/Kg	50	12/6/2004		
Benzo(k)fluoranthene	ND	33000	µg/Kg	50	12/6/2004		
Chrysene	ND	33000	µg/Kg	50	12/6/2004		
Dibenz(a,h)anthracene	ND	33000	µg/Kg	50	12/6/2004		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-001

Client Sample ID: T1-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	33000	µg/Kg	50	12/6/2004
Fluorene	ND	33000	µg/Kg	50	12/6/2004
Indeno(1,2,3-cd)pyrene	ND	33000	µg/Kg	50	12/6/2004
Naphthalene	ND	33000	µg/Kg	50	12/6/2004
Phenanthrene	ND	33000	µg/Kg	50	12/6/2004
Pyrene	ND	33000	µg/Kg	50	12/6/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-004

**Client Sample ID:** T1-2-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

### (EPA 3050B)

### EPA 8010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	ND	1.0	mg/Kg	1	12/6/2004
Barium	70	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	6.4	1.0	mg/Kg	1	12/6/2004
Cobalt	3.2	1.0	mg/Kg	1	12/6/2004
Copper	6.4	1.0	mg/Kg	1	12/6/2004
Lead	3.8	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	4.7	1.0	mg/Kg	1	12/6/2004
Selenium	ND	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	11	1.0	mg/Kg	1	12/6/2004
Zinc	15	1.0	mg/Kg	1	12/6/2004

## HYDROCARBON CHAIN IDENTIFICATION

### (LUFT)

### EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	160	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C16-C22	31	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C23-C32	180	10	mg/Kg	1	12/5/2004

## GASOLINE RANGE ORGANICS BY GC/FID

### EPA 8015B(M)

RunID: GC2_041201A	QC Batch: E04VS342	PrepDate: 11/30/2004	Analyst: JV		
GRO	ND	0.95	mg/Kg	1	12/1/2004

## MERCURY BY COLD VAPOR TECHNIQUE

### (EPA 7471)

### EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range  
 H - Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-004

Client Sample ID: T1-2-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,1-Dichloroethene	ND	4.4	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	4.4	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	4.4	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	4.4	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	8.8	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	4.4	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	4.4	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	4.4	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	4.4	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	4.4	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	4.4	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	4.4	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	4.4	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	4.4	µg/Kg	1	12/1/2004
Benzene	ND	4.4	µg/Kg	1	12/1/2004
Bromobenzene	ND	4.4	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	4.4	µg/Kg	1	12/1/2004
Bromoform	ND	4.4	µg/Kg	1	12/1/2004
Bromomethane	ND	4.4	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	4.4	µg/Kg	1	12/1/2004
Chlorobenzene	ND	4.4	µg/Kg	1	12/1/2004
Chloroethane	ND	4.4	µg/Kg	1	12/1/2004
Chloroform	ND	4.4	µg/Kg	1	12/1/2004
Chloromethane	ND	4.4	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethene	ND	4.4	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	4.4	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-004

**Client Sample ID:** T1-2-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS3_041201A	QC Batch:	R04VS193	PrepDate:	11/30/2004	Analyst:	JPC
Dibromochloromethane	ND	4.4	µg/Kg	1	12/1/2004		
Dibromomethane	ND	4.4	µg/Kg	1	12/1/2004		
Dichlorodifluoromethane	ND	4.4	µg/Kg	1	12/1/2004		
Ethylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
Hexachlorobutadiene	ND	4.4	µg/Kg	1	12/1/2004		
Isopropylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
m,p-Xylene	ND	4.4	µg/Kg	1	12/1/2004		
Methylene chloride	ND	4.4	µg/Kg	1	12/1/2004		
n-Butylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
n-Propylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
Naphthalene	ND	4.4	µg/Kg	1	12/1/2004		
o-Xylene	ND	4.4	µg/Kg	1	12/1/2004		
sec-Butylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
Styrene	ND	4.4	µg/Kg	1	12/1/2004		
tert-Butylbenzene	ND	4.4	µg/Kg	1	12/1/2004		
Tetrachloroethene	ND	4.4	µg/Kg	1	12/1/2004		
Toluene	ND	4.4	µg/Kg	1	12/1/2004		
trans-1,2-Dichloroethene	ND	4.4	µg/Kg	1	12/1/2004		
Trichloroethene	ND	4.4	µg/Kg	1	12/1/2004		
Trichlorofluoromethane	ND	4.4	µg/Kg	1	12/1/2004		
Vinyl chloride	ND	4.4	µg/Kg	1	12/1/2004		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID:	MS7_041202A	QC Batch:	20428	PrepDate:	12/2/2004	Analyst:	JWS
2-Methylnaphthalene	ND	3300	µg/Kg	10	12/3/2004		
Acenaphthene	ND	3300	µg/Kg	10	12/3/2004		
Acenaphthylene	ND	3300	µg/Kg	10	12/3/2004		
Anthracene	ND	3300	µg/Kg	10	12/3/2004		
Benzo(a)anthracene	ND	3300	µg/Kg	10	12/3/2004		
Benzo(a)pyrene	ND	3300	µg/Kg	10	12/3/2004		
Benzo(b)fluoranthene	ND	3300	µg/Kg	10	12/3/2004		
Benzo(g,h,i)perylene	ND	3300	µg/Kg	10	12/3/2004		
Benzo(k)fluoranthene	ND	3300	µg/Kg	10	12/3/2004		
Chrysene	ND	3300	µg/Kg	10	12/3/2004		
Dibenz(a,h)anthracene	ND	3300	µg/Kg	10	12/3/2004		

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 I - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range  
 H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-004

**Client Sample ID:** T1-2-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	3300	µg/Kg	10	12/3/2004
Fluorene	ND	3300	µg/Kg	10	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	3300	µg/Kg	10	12/3/2004
Naphthalene	ND	3300	µg/Kg	10	12/3/2004
Phenanthrene	ND	3300	µg/Kg	10	12/3/2004
Pyrene	ND	3300	µg/Kg	10	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified



**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-007

**Client Sample ID:** T1-3-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

(EPA 3050B)

EPA 6010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	ND	1.0	mg/Kg	1	12/6/2004
Barium	140	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	5.5	1.0	mg/Kg	1	12/6/2004
Cobalt	2.8	1.0	mg/Kg	1	12/6/2004
Copper	6.4	1.0	mg/Kg	1	12/6/2004
Lead	6.2	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	4.2	1.0	mg/Kg	1	12/6/2004
Selenium	ND	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	9.9	1.0	mg/Kg	1	12/6/2004
Zinc	16	1.0	mg/Kg	1	12/6/2004

**HYDROCARBON CHAIN IDENTIFICATION**

(LUFT)

EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	210	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C16-C22	35	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C23-C32	220	10	mg/Kg	1	12/5/2004

**GASOLINE RANGE ORGANICS BY GC/FID**

EPA 8015B(M)

RunID: GC2_041202B	QC Batch: E04VS344	PrepDate: 11/30/2004	Analyst: JV		
GRO	ND	0.98	mg/Kg	1	12/3/2004

**MERCURY BY COLD VAPOR TECHNIQUE**

(EPA 7471)

EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-007

Client Sample ID: T1-3-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,1-Dichloroethene	ND	5.7	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	5.7	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	5.7	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	5.7	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	5.7	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	5.7	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	5.7	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	5.7	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	5.7	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	5.7	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	5.7	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	5.7	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	5.7	µg/Kg	1	12/1/2004
Benzene	ND	5.7	µg/Kg	1	12/1/2004
Bromobenzene	ND	5.7	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	5.7	µg/Kg	1	12/1/2004
Bromoform	ND	5.7	µg/Kg	1	12/1/2004
Bromomethane	ND	5.7	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	5.7	µg/Kg	1	12/1/2004
Chlorobenzene	ND	5.7	µg/Kg	1	12/1/2004
Chloroethane	ND	5.7	µg/Kg	1	12/1/2004
Chloroform	ND	5.7	µg/Kg	1	12/1/2004
Chloromethane	ND	5.7	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethene	ND	5.7	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	5.7	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H-Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-007

Client Sample ID: T1-3-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS183	PrepDate: 11/30/2004	Analyst: JPC		
Dibromochloromethane	ND	5.7	µg/Kg	1	12/1/2004
Dibromomethane	ND	5.7	µg/Kg	1	12/1/2004
Dichlorodifluoromethane	ND	5.7	µg/Kg	1	12/1/2004
Ethylbenzene	ND	5.7	µg/Kg	1	12/1/2004
Hexachlorobutadiene	ND	5.7	µg/Kg	1	12/1/2004
Isopropylbenzene	ND	5.7	µg/Kg	1	12/1/2004
m,p-Xylene	ND	5.7	µg/Kg	1	12/1/2004
Methylene chloride	ND	5.7	µg/Kg	1	12/1/2004
n-Butylbenzene	ND	5.7	µg/Kg	1	12/1/2004
n-Propylbenzene	ND	5.7	µg/Kg	1	12/1/2004
Naphthalene	ND	5.7	µg/Kg	1	12/1/2004
o-Xylene	ND	5.7	µg/Kg	1	12/1/2004
sec-Butylbenzene	ND	5.7	µg/Kg	1	12/1/2004
Styrene	ND	5.7	µg/Kg	1	12/1/2004
tert-Butylbenzene	ND	5.7	µg/Kg	1	12/1/2004
Tetrachloroethene	ND	5.7	µg/Kg	1	12/1/2004
Toluene	ND	5.7	µg/Kg	1	12/1/2004
trans-1,2-Dichloroethene	ND	5.7	µg/Kg	1	12/1/2004
Trichloroethene	ND	5.7	µg/Kg	1	12/1/2004
Trichlorofluoromethane	ND	5.7	µg/Kg	1	12/1/2004
Vinyl chloride	ND	5.7	µg/Kg	1	12/1/2004

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
2-Methylnaphthalene	ND	3300	µg/Kg	10	12/3/2004
Acenaphthene	ND	3300	µg/Kg	10	12/3/2004
Acenaphthylene	ND	3300	µg/Kg	10	12/3/2004
Anthracene	ND	3300	µg/Kg	10	12/3/2004
Benzo(a)anthracene	ND	3300	µg/Kg	10	12/3/2004
Benzo(a)pyrene	ND	3300	µg/Kg	10	12/3/2004
Benzo(b)fluoranthene	ND	3300	µg/Kg	10	12/3/2004
Benzo(g,h,i)perylene	ND	3300	µg/Kg	10	12/3/2004
Benzo(k)fluoranthene	ND	3300	µg/Kg	10	12/3/2004
Chrysene	ND	3300	µg/Kg	10	12/3/2004
Dibenz(a,h)anthracene	ND	3300	µg/Kg	10	12/3/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-007

**Client Sample ID:** T1-3-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	3300	µg/Kg	10	12/3/2004
Fluorene	ND	3300	µg/Kg	10	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	3300	µg/Kg	10	12/3/2004
Naphthalene	ND	3300	µg/Kg	10	12/3/2004
Phenanthrene	ND	3300	µg/Kg	10	12/3/2004
Pyrene	ND	3300	µg/Kg	10	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-010

**Client Sample ID:** T2-1-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID:	ICP6_041206A	QC Batch:	20458	PrepDate:	12/6/2004	Analyst:	RQ
Antimony	ND	1.0	mg/Kg	1	12/6/2004		
Arsenic	ND	1.0	mg/Kg	1	12/6/2004		
Barium	42	1.0	mg/Kg	1	12/6/2004		
Beryllium	ND	1.0	mg/Kg	1	12/6/2004		
Cadmium	ND	1.0	mg/Kg	1	12/6/2004		
Chromium	6.0	1.0	mg/Kg	1	12/6/2004		
Cobalt	3.1	1.0	mg/Kg	1	12/6/2004		
Copper	6.6	1.0	mg/Kg	1	12/6/2004		
Lead	1.8	1.0	mg/Kg	1	12/6/2004		
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004		
Nickel	4.7	1.0	mg/Kg	1	12/6/2004		
Selenium	ND	1.0	mg/Kg	1	12/6/2004		
Silver	ND	1.0	mg/Kg	1	12/6/2004		
Thallium	ND	1.0	mg/Kg	1	12/6/2004		
Vanadium	10	1.0	mg/Kg	1	12/6/2004		
Zinc	13	1.0	mg/Kg	1	12/6/2004		

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID:	GC7_041130B	QC Batch:	20414	PrepDate:	12/1/2004	Analyst:	CBR
T/R Hydrocarbons: >C32	890	50	mg/Kg	5	12/7/2004		
T/R Hydrocarbons: C10-C12	250	50	mg/Kg	5	12/7/2004		
T/R Hydrocarbons: C13-C15	590	50	mg/Kg	5	12/7/2004		
T/R Hydrocarbons: C16-C22	1900	50	mg/Kg	5	12/7/2004		
T/R Hydrocarbons: C23-C32	2800	50	mg/Kg	5	12/7/2004		

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID:	GC2_041201A	QC Batch:	E04VS342	PrepDate:	11/30/2004	Analyst:	JV
GRO	15	1.1	mg/Kg	1	12/1/2004		

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID:	AA1_041206A	QC Batch:	20456	PrepDate:	12/6/2004	Analyst:	JT
Mercury	ND	0.10	mg/Kg	1	12/6/2004		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-010

Client Sample ID: T2-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	5.0	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	5.0	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	250	5.0	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	9.9	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	5.0	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	5.0	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	5.0	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	28	5.0	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	5.0	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	5.0	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	5.0	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	5.0	µg/Kg	1	12/1/2004
4-Isopropyltoluene	17	5.0	µg/Kg	1	12/1/2004
Benzene	ND	5.0	µg/Kg	1	12/1/2004
Bromobenzene	ND	5.0	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	5.0	µg/Kg	1	12/1/2004
Bromoform	ND	5.0	µg/Kg	1	12/1/2004
Bromomethane	ND	5.0	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	5.0	µg/Kg	1	12/1/2004
Chlorobenzene	ND	5.0	µg/Kg	1	12/1/2004
Chloroethane	ND	5.0	µg/Kg	1	12/1/2004
Chloroform	ND	5.0	µg/Kg	1	12/1/2004
Chloromethane	ND	5.0	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethane	ND	5.0	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	5.0	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-010

Client Sample ID: T2-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS183	PrepDate: 11/30/2004	Analyst: JPC		
Dibromochloromethane	ND	5.0	µg/Kg	1	12/1/2004
Dibromomethane	ND	5.0	µg/Kg	1	12/1/2004
Dichlorodifluoromethane	ND	5.0	µg/Kg	1	12/1/2004
Ethylbenzene	16	5.0	µg/Kg	1	12/1/2004
Hexachlorobutadiene	ND	5.0	µg/Kg	1	12/1/2004
Isopropylbenzene	33	5.0	µg/Kg	1	12/1/2004
m,p-Xylene	59	5.0	µg/Kg	1	12/1/2004
Methylene chloride	ND	5.0	µg/Kg	1	12/1/2004
n-Butylbenzene	12	5.0	µg/Kg	1	12/1/2004
n-Propylbenzene	45	5.0	µg/Kg	1	12/1/2004
Naphthalene	110	5.0	µg/Kg	1	12/1/2004
o-Xylene	ND	5.0	µg/Kg	1	12/1/2004
sec-Butylbenzene	17	5.0	µg/Kg	1	12/1/2004
Styrene	ND	5.0	µg/Kg	1	12/1/2004
tert-Butylbenzene	ND	5.0	µg/Kg	1	12/1/2004
Tetrachloroethene	ND	5.0	µg/Kg	1	12/1/2004
Toluene	ND	5.0	µg/Kg	1	12/1/2004
trans-1,2-Dichloroethene	ND	5.0	µg/Kg	1	12/1/2004
Trichloroethene	ND	5.0	µg/Kg	1	12/1/2004
Trichlorofluoromethane	ND	5.0	µg/Kg	1	12/1/2004
Vinyl chloride	ND	5.0	µg/Kg	1	12/1/2004

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

(EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
2-Methylnaphthalene	ND	16000	µg/Kg	50	12/3/2004
Acenaphthene	ND	16000	µg/Kg	50	12/3/2004
Acenaphthylene	ND	16000	µg/Kg	50	12/3/2004
Anthracene	ND	16000	µg/Kg	50	12/3/2004
Benzo(a)anthracene	ND	16000	µg/Kg	50	12/3/2004
Benzo(a)pyrene	ND	16000	µg/Kg	50	12/3/2004
Benzo(b)fluoranthene	ND	16000	µg/Kg	50	12/3/2004
Benzo(g,h,i)perylene	ND	16000	µg/Kg	50	12/3/2004
Benzo(k)fluoranthene	ND	16000	µg/Kg	50	12/3/2004
Chrysene	ND	16000	µg/Kg	50	12/3/2004
Dibenz(a,h)anthracene	ND	16000	µg/Kg	50	12/3/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-010

**Client Sample ID:** T2-1-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	16000	µg/Kg	50	12/3/2004
Fluorene	ND	16000	µg/Kg	50	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	16000	µg/Kg	50	12/3/2004
Naphthalene	ND	16000	µg/Kg	50	12/3/2004
Phenanthrene	ND	16000	µg/Kg	50	12/3/2004
Pyrene	ND	16000	µg/Kg	50	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-013

Client Sample ID: T2-2-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	ND	1.0	mg/Kg	1	12/6/2004
Barium	50	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	7.7	1.0	mg/Kg	1	12/6/2004
Cobalt	3.9	1.0	mg/Kg	1	12/6/2004
Copper	8.3	1.0	mg/Kg	1	12/6/2004
Lead	2.1	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	6.1	1.0	mg/Kg	1	12/6/2004
Selenium	ND	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	13	1.0	mg/Kg	1	12/6/2004
Zinc	15	1.0	mg/Kg	1	12/6/2004

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	19	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C10-C12	16	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C13-C15	35	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C16-C22	69	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C23-C32	66	10	mg/Kg	1	12/5/2004

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_041201A	QC Batch: E04VS342	PrepDate: 11/30/2004	Analyst: JV		
GRO	ND	1.2	mg/Kg	1	12/1/2004

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-013

Client Sample ID: T2-2-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	5.4	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	5.4	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	5.4	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	5.4	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	5.4	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	5.4	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	5.4	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	5.4	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	5.4	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	5.4	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	5.4	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	5.4	µg/Kg	1	12/1/2004
Benzene	ND	5.4	µg/Kg	1	12/1/2004
Bromobenzene	ND	5.4	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	5.4	µg/Kg	1	12/1/2004
Bromoform	ND	5.4	µg/Kg	1	12/1/2004
Bromomethane	ND	5.4	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	5.4	µg/Kg	1	12/1/2004
Chlorobenzene	ND	5.4	µg/Kg	1	12/1/2004
Chloroethane	ND	5.4	µg/Kg	1	12/1/2004
Chloroform	ND	5.4	µg/Kg	1	12/1/2004
Chloromethane	ND	5.4	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethene	ND	5.4	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	5.4	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-013

**Client Sample ID:** T2-2-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID:	MS3_041201A	QC Batch:	R04VS193	PrepDate:	11/30/2004	Analyst:	JPC
Dibromochloromethane	ND	5.4	µg/Kg	1	12/1/2004		
Dibromomethane	ND	5.4	µg/Kg	1	12/1/2004		
Dichlorodifluoromethane	ND	5.4	µg/Kg	1	12/1/2004		
Ethylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
Hexachlorobutadiene	ND	5.4	µg/Kg	1	12/1/2004		
Isopropylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
m,p-Xylene	ND	5.4	µg/Kg	1	12/1/2004		
Methylene chloride	ND	5.4	µg/Kg	1	12/1/2004		
n-Butylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
n-Propylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
Naphthalene	ND	5.4	µg/Kg	1	12/1/2004		
o-Xylene	ND	5.4	µg/Kg	1	12/1/2004		
sec-Butylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
Styrene	ND	5.4	µg/Kg	1	12/1/2004		
tert-Butylbenzene	ND	5.4	µg/Kg	1	12/1/2004		
Tetrachloroethane	ND	5.4	µg/Kg	1	12/1/2004		
Toluene	ND	5.4	µg/Kg	1	12/1/2004		
trans-1,2-Dichloroethene	ND	5.4	µg/Kg	1	12/1/2004		
Trichloroethene	ND	5.4	µg/Kg	1	12/1/2004		
Trichlorofluoromethane	ND	5.4	µg/Kg	1	12/1/2004		
Vinyl chloride	ND	5.4	µg/Kg	1	12/1/2004		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

### (EPA 3550B)

### EPA 8270C

RunID:	MS7_041202A	QC Batch:	20428	PrepDate:	12/2/2004	Analyst:	JWS
2-Methylnaphthalene	ND	330	µg/Kg	1	12/3/2004		
Acenaphthene	ND	330	µg/Kg	1	12/3/2004		
Acenaphthylene	ND	330	µg/Kg	1	12/3/2004		
Anthracene	ND	330	µg/Kg	1	12/3/2004		
Benzo(a)anthracene	ND	330	µg/Kg	1	12/3/2004		
Benzo(a)pyrene	ND	330	µg/Kg	1	12/3/2004		
Benzo(b)fluoranthene	ND	330	µg/Kg	1	12/3/2004		
Benzo(g,h,i)perylene	ND	330	µg/Kg	1	12/3/2004		
Benzo(k)fluoranthene	ND	330	µg/Kg	1	12/3/2004		
Chrysene	ND	330	µg/Kg	1	12/3/2004		
Dibenz(a,h)anthracene	ND	330	µg/Kg	1	12/3/2004		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
 Lab Order: 072617  
 Project: Bloomfield II, 205372005  
 Lab ID: 072617-013

Client Sample ID: T2-2-2  
 Collection Date: 11/30/2004  
 Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

## EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS
Fluoranthene	ND	330	µg/Kg
Fluorene	ND	330	µg/Kg
Indeno(1,2,3-cd)pyrene	ND	330	µg/Kg
Naphthalene	ND	330	µg/Kg
Phenanthrene	ND	330	µg/Kg
Pyrene	ND	330	µg/Kg

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-016

**Client Sample ID:** T2-3-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID:	ICP6_041206A	QC Batch:	20458	PrepDate:	12/6/2004	Analyst:	RQ
Antimony	ND	1.0	mg/Kg	1	12/6/2004		
Arsenic	ND	1.0	mg/Kg	1	12/6/2004		
Barium	59	1.0	mg/Kg	1	12/6/2004		
Beryllium	ND	1.0	mg/Kg	1	12/6/2004		
Cadmium	ND	1.0	mg/Kg	1	12/6/2004		
Chromium	6.3	1.0	mg/Kg	1	12/6/2004		
Cobalt	3.3	1.0	mg/Kg	1	12/6/2004		
Copper	7.0	1.0	mg/Kg	1	12/6/2004		
Lead	32	1.0	mg/Kg	1	12/6/2004		
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004		
Nickel	4.9	1.0	mg/Kg	1	12/6/2004		
Selenium	ND	1.0	mg/Kg	1	12/6/2004		
Silver	ND	1.0	mg/Kg	1	12/6/2004		
Thallium	ND	1.0	mg/Kg	1	12/6/2004		
Vanadium	11	1.0	mg/Kg	1	12/6/2004		
Zinc	18	1.0	mg/Kg	1	12/6/2004		

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID:	GC7_041130B	QC Batch:	20414	PrepDate:	12/1/2004	Analyst:	CBR
T/R Hydrocarbons: >C32	17	10	mg/Kg	1	12/5/2004		
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	12/5/2004		
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	12/5/2004		
T/R Hydrocarbons: C16-C22	ND	10	mg/Kg	1	12/5/2004		
T/R Hydrocarbons: C23-C32	15	10	mg/Kg	1	12/5/2004		

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID:	GC2_041201A	QC Batch:	E04VS342	PrepDate:	11/30/2004	Analyst:	JV
GRO	ND	0.83	mg/Kg	1	12/1/2004		

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID:	AA1_041206A	QC Batch:	20456	PrepDate:	12/6/2004	Analyst:	JT
Mercury	ND	0.10	mg/Kg	1	12/6/2004		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank E - Value above quantitation range

DO - Surrogate Diluted Out H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-016

Client Sample ID: T2-3-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

## EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,1-Dichloroethene	ND	4.9	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	4.9	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	4.9	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	4.9	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	9.7	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	4.9	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	4.9	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	4.9	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	4.9	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	4.9	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	4.9	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	4.9	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	4.9	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	4.9	µg/Kg	1	12/1/2004
Benzene	ND	4.9	µg/Kg	1	12/1/2004
Bromobenzene	ND	4.9	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	4.9	µg/Kg	1	12/1/2004
Bromoform	ND	4.9	µg/Kg	1	12/1/2004
Bromomethane	ND	4.9	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	4.9	µg/Kg	1	12/1/2004
Chlorobenzene	ND	4.9	µg/Kg	1	12/1/2004
Chloroethane	ND	4.9	µg/Kg	1	12/1/2004
Chloroform	ND	4.9	µg/Kg	1	12/1/2004
Chloromethane	ND	4.9	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethane	ND	4.9	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	4.9	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-016

**Client Sample ID:** T2-3-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
Dibromochloromethane	ND	4.9	µg/Kg	1	12/1/2004
Dibromomethane	ND	4.9	µg/Kg	1	12/1/2004
Dichlorodifluoromethane	ND	4.9	µg/Kg	1	12/1/2004
Ethylbenzene	ND	4.9	µg/Kg	1	12/1/2004
Hexachlorobutadiene	ND	4.9	µg/Kg	1	12/1/2004
Isopropylbenzene	ND	4.9	µg/Kg	1	12/1/2004
m,p-Xylene	ND	4.9	µg/Kg	1	12/1/2004
Methylene chloride	ND	4.9	µg/Kg	1	12/1/2004
n-Butylbenzene	ND	4.9	µg/Kg	1	12/1/2004
n-Propylbenzene	ND	4.9	µg/Kg	1	12/1/2004
Naphthalene	ND	4.9	µg/Kg	1	12/1/2004
o-Xylene	ND	4.9	µg/Kg	1	12/1/2004
sec-Butylbenzene	ND	4.9	µg/Kg	1	12/1/2004
Styrene	ND	4.9	µg/Kg	1	12/1/2004
tert-Butylbenzene	ND	4.9	µg/Kg	1	12/1/2004
Tetrachloroethane	ND	4.9	µg/Kg	1	12/1/2004
Toluene	ND	4.9	µg/Kg	1	12/1/2004
trans-1,2-Dichloroethane	ND	4.9	µg/Kg	1	12/1/2004
Trichloroethane	ND	4.9	µg/Kg	1	12/1/2004
Trichlorofluoromethane	ND	4.9	µg/Kg	1	12/1/2004
Vinyl chloride	ND	4.9	µg/Kg	1	12/1/2004

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS

(EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
2-Methylnaphthalene	ND	330	µg/Kg	1	12/3/2004
Acenaphthene	ND	330	µg/Kg	1	12/3/2004
Acenaphthylene	ND	330	µg/Kg	1	12/3/2004
Anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)pyrene	ND	330	µg/Kg	1	12/3/2004
Benzo(b)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Benzo(g,h,i)perylene	ND	330	µg/Kg	1	12/3/2004
Benzo(k)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Chrysene	ND	330	µg/Kg	1	12/3/2004
Dibenz(a,h)anthracene	ND	330	µg/Kg	1	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range  
 H - Samples exceeding holding time

Results are wet unless otherwise specified

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Advanced Technology

**Advanced Technology Laboratories**

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-016

Client Sample ID: T2-3-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	330	µg/Kg	1	12/3/2004
Fluorene	ND	330	µg/Kg	1	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	330	µg/Kg	1	12/3/2004
Naphthalene	ND	330	µg/Kg	1	12/3/2004
Phenanthrene	ND	330	µg/Kg	1	12/3/2004
Pyrene	ND	330	µg/Kg	1	12/3/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-019

**Client Sample ID:** T3-1-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	1.9	1.0	mg/Kg	1	12/6/2004
Barium	49	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	8.8	1.0	mg/Kg	1	12/6/2004
Cobalt	4.9	1.0	mg/Kg	1	12/6/2004
Copper	9.4	1.0	mg/Kg	1	12/6/2004
Lead	3.0	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	7.0	1.0	mg/Kg	1	12/6/2004
Selenium	1.7	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	15	1.0	mg/Kg	1	12/6/2004
Zinc	16	1.0	mg/Kg	1	12/6/2004

## HYDROCARBON CHAIN IDENTIFICATION (LUFT)

EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	18	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C10-C12	11	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C16-C22	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C23-C32	14	10	mg/Kg	1	12/5/2004

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_041201A	QC Batch: E04VS342	PrepDate: 11/30/2004	Analyst: JV		
GRO	ND	1.0	mg/Kg	1	12/1/2004

## MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)

EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range  
 H - Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-019

Client Sample ID: T3-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

## EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	5.8	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	5.8	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	5.8	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	12	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	5.8	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	5.8	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	5.8	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	5.8	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	5.8	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	5.8	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	5.8	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	5.8	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	5.8	µg/Kg	1	12/1/2004
Benzene	ND	5.8	µg/Kg	1	12/1/2004
Bromobenzene	ND	5.8	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	5.8	µg/Kg	1	12/1/2004
Bromoform	ND	5.8	µg/Kg	1	12/1/2004
Bromomethane	ND	5.8	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	5.8	µg/Kg	1	12/1/2004
Chlorobenzene	ND	5.8	µg/Kg	1	12/1/2004
Chloroethane	ND	5.8	µg/Kg	1	12/1/2004
Chloroform	ND	5.8	µg/Kg	1	12/1/2004
Chloromethane	ND	5.8	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethane	ND	5.8	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	5.8	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-019

Client Sample ID: T3-1-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
Dibromochloromethane	ND	5.8	µg/Kg	1	12/1/2004
Dibromomethane	ND	5.8	µg/Kg	1	12/1/2004
Dichlorodifluoromethane	ND	5.8	µg/Kg	1	12/1/2004
Ethylbenzene	ND	5.8	µg/Kg	1	12/1/2004
Hexachlorobutadiene	ND	5.8	µg/Kg	1	12/1/2004
Isopropylbenzene	ND	5.8	µg/Kg	1	12/1/2004
m,p-Xylene	ND	5.8	µg/Kg	1	12/1/2004
Methylene chloride	ND	5.8	µg/Kg	1	12/1/2004
n-Butylbenzene	ND	5.8	µg/Kg	1	12/1/2004
n-Propylbenzene	ND	5.8	µg/Kg	1	12/1/2004
Naphthalene	ND	5.8	µg/Kg	1	12/1/2004
o-Xylene	ND	5.8	µg/Kg	1	12/1/2004
sec-Butylbenzene	ND	5.8	µg/Kg	1	12/1/2004
Styrene	ND	5.8	µg/Kg	1	12/1/2004
tert-Butylbenzene	ND	5.8	µg/Kg	1	12/1/2004
Tetrachloroethene	ND	5.8	µg/Kg	1	12/1/2004
Toluene	ND	5.8	µg/Kg	1	12/1/2004
trans-1,2-Dichloroethene	ND	5.8	µg/Kg	1	12/1/2004
Trichloroethene	ND	5.8	µg/Kg	1	12/1/2004
Trichlorofluoromethane	ND	5.8	µg/Kg	1	12/1/2004
Vinyl chloride	ND	5.8	µg/Kg	1	12/1/2004

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
2-Methylnaphthalene	ND	330	µg/Kg	1	12/3/2004
Acenaphthene	ND	330	µg/Kg	1	12/3/2004
Acenaphthylene	ND	330	µg/Kg	1	12/3/2004
Anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)pyrene	ND	330	µg/Kg	1	12/3/2004
Benzo(b)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Benzo(g,h,i)perylene	ND	330	µg/Kg	1	12/3/2004
Benzo(k)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Chrysene	ND	330	µg/Kg	1	12/3/2004
Dibenz(a,h)anthracene	ND	330	µg/Kg	1	12/3/2004

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-019

**Client Sample ID:** T3-1-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	330	µg/Kg	1	12/3/2004
Fluorene	ND	330	µg/Kg	1	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	330	µg/Kg	1	12/3/2004
Naphthalene	ND	330	µg/Kg	1	12/3/2004
Phenanthrene	ND	330	µg/Kg	1	12/3/2004
Pyrene	ND	330	µg/Kg	1	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore

Client Sample ID: T3-2-2

Lab Order: 072617

Project: Bloomfield II, 205372005

Collection Date: 11/30/2004

Lab ID: 072617-022

Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP6_041206A	QC Batch: 20458	PrepDate: 12/6/2004	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	12/6/2004
Arsenic	ND	1.0	mg/Kg	1	12/6/2004
Barium	47	1.0	mg/Kg	1	12/6/2004
Beryllium	ND	1.0	mg/Kg	1	12/6/2004
Cadmium	ND	1.0	mg/Kg	1	12/6/2004
Chromium	6.8	1.0	mg/Kg	1	12/6/2004
Cobalt	3.7	1.0	mg/Kg	1	12/6/2004
Copper	7.3	1.0	mg/Kg	1	12/6/2004
Lead	1.9	1.0	mg/Kg	1	12/6/2004
Molybdenum	ND	1.0	mg/Kg	1	12/6/2004
Nickel	5.4	1.0	mg/Kg	1	12/6/2004
Selenium	ND	1.0	mg/Kg	1	12/6/2004
Silver	ND	1.0	mg/Kg	1	12/6/2004
Thallium	ND	1.0	mg/Kg	1	12/6/2004
Vanadium	12	1.0	mg/Kg	1	12/6/2004
Zinc	15	1.0	mg/Kg	1	12/6/2004

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID: GC7_041130B	QC Batch: 20414	PrepDate: 12/1/2004	Analyst: CBR		
T/R Hydrocarbons: >C32	21	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C10-C12	11	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C16-C22	ND	10	mg/Kg	1	12/5/2004
T/R Hydrocarbons: C23-C32	15	10	mg/Kg	1	12/5/2004

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_041201A	QC Batch: E04VS342	PrepDate: 11/30/2004	Analyst: JV		
GRO	ND	0.97	mg/Kg	1	12/1/2004

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID: AA1_041206A	QC Batch: 20456	PrepDate: 12/6/2004	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	12/6/2004

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

DO - Surrogate Diluted Out

H - Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-022

Client Sample ID: T3-2-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,1,1-Trichloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,1,2,2-Tetrachloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,1,2-Trichloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,1-Dichloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,1-Dichloroethene	ND	5.5	µg/Kg	1	12/1/2004
1,1-Dichloropropene	ND	5.5	µg/Kg	1	12/1/2004
1,2,3-Trichlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
1,2,3-Trichloropropane	ND	5.5	µg/Kg	1	12/1/2004
1,2,4-Trichlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
1,2,4-Trimethylbenzene	ND	5.5	µg/Kg	1	12/1/2004
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	12/1/2004
1,2-Dibromoethane	ND	5.5	µg/Kg	1	12/1/2004
1,2-Dichlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
1,2-Dichloroethane	ND	5.5	µg/Kg	1	12/1/2004
1,2-Dichloropropane	ND	5.5	µg/Kg	1	12/1/2004
1,3,5-Trimethylbenzene	ND	5.5	µg/Kg	1	12/1/2004
1,3-Dichlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
1,3-Dichloropropane	ND	5.5	µg/Kg	1	12/1/2004
1,4-Dichlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
2,2-Dichloropropane	ND	5.5	µg/Kg	1	12/1/2004
2-Chlorotoluene	ND	5.5	µg/Kg	1	12/1/2004
4-Chlorotoluene	ND	5.5	µg/Kg	1	12/1/2004
4-Isopropyltoluene	ND	5.5	µg/Kg	1	12/1/2004
Benzene	ND	5.5	µg/Kg	1	12/1/2004
Bromobenzene	ND	5.5	µg/Kg	1	12/1/2004
Bromodichloromethane	ND	5.5	µg/Kg	1	12/1/2004
Bromoform	ND	5.5	µg/Kg	1	12/1/2004
Bromomethane	ND	5.5	µg/Kg	1	12/1/2004
Carbon tetrachloride	ND	5.5	µg/Kg	1	12/1/2004
Chlorobenzene	ND	5.5	µg/Kg	1	12/1/2004
Chloroethane	ND	5.5	µg/Kg	1	12/1/2004
Chloroform	ND	5.5	µg/Kg	1	12/1/2004
Chloromethane	ND	5.5	µg/Kg	1	12/1/2004
cis-1,2-Dichloroethene	ND	5.5	µg/Kg	1	12/1/2004
cis-1,3-Dichloropropene	ND	5.5	µg/Kg	1	12/1/2004

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

DO - Surrogate Diluted Out

H - Samples exceeding holding time

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Results are wet unless otherwise specified



Advanced Technology  
Laboratories

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
Lab Order: 072617  
Project: Bloomfield II, 205372005  
Lab ID: 072617-022

Client Sample ID: T3-2-2  
Collection Date: 11/30/2004  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_041201A	QC Batch: R04VS193	PrepDate: 11/30/2004	Analyst: JPC		
Dibromochloromethane	ND	5.5	µg/Kg	1	12/1/2004
Dibromomethane	ND	5.5	µg/Kg	1	12/1/2004
Dichlorodifluoromethane	ND	5.5	µg/Kg	1	12/1/2004
Ethylbenzene	ND	5.5	µg/Kg	1	12/1/2004
Hexachlorobutadiene	ND	5.5	µg/Kg	1	12/1/2004
Isopropylbenzene	ND	5.5	µg/Kg	1	12/1/2004
m,p-Xylene	ND	5.5	µg/Kg	1	12/1/2004
Methylene chloride	ND	5.5	µg/Kg	1	12/1/2004
n-Butylbenzene	ND	5.5	µg/Kg	1	12/1/2004
n-Propylbenzene	ND	5.5	µg/Kg	1	12/1/2004
Naphthalene	ND	5.5	µg/Kg	1	12/1/2004
o-Xylene	ND	5.5	µg/Kg	1	12/1/2004
sec-Butylbenzene	ND	5.5	µg/Kg	1	12/1/2004
Styrene	ND	5.5	µg/Kg	1	12/1/2004
tert-Butylbenzene	ND	5.5	µg/Kg	1	12/1/2004
Tetrachloroethene	ND	5.5	µg/Kg	1	12/1/2004
Toluene	ND	5.5	µg/Kg	1	12/1/2004
trans-1,2-Dichloroethene	ND	5.5	µg/Kg	1	12/1/2004
Trichloroethene	ND	5.5	µg/Kg	1	12/1/2004
Trichlorofluoromethane	ND	5.5	µg/Kg	1	12/1/2004
Vinyl chloride	ND	5.5	µg/Kg	1	12/1/2004

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
2-Methylnaphthalene	ND	330	µg/Kg	1	12/3/2004
Acenaphthene	ND	330	µg/Kg	1	12/3/2004
Acenaphthylene	ND	330	µg/Kg	1	12/3/2004
Anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)anthracene	ND	330	µg/Kg	1	12/3/2004
Benzo(a)pyrene	ND	330	µg/Kg	1	12/3/2004
Benzo(b)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Benzo(g,h,i)perylene	ND	330	µg/Kg	1	12/3/2004
Benzo(k)fluoranthene	ND	330	µg/Kg	1	12/3/2004
Chrysene	ND	330	µg/Kg	1	12/3/2004
Dibenz(a,h)anthracene	ND	330	µg/Kg	1	12/3/2004

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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**Advanced Technology Laboratories**

Date: 08-Dec-04

**CLIENT:** Ninyo & Moore  
**Lab Order:** 072617  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 072617-022

**Client Sample ID:** T3-2-2  
**Collection Date:** 11/30/2004  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
**(EPA 3550B)**

**EPA 8270C**

RunID: MS7_041202A	QC Batch: 20428	PrepDate: 12/2/2004	Analyst: JWS		
Fluoranthene	ND	330	µg/Kg	1	12/3/2004
Fluorene	ND	330	µg/Kg	1	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	330	µg/Kg	1	12/3/2004
Naphthalene	ND	330	µg/Kg	1	12/3/2004
Phenanthrene	ND	330	µg/Kg	1	12/3/2004
Pyrene	ND	330	µg/Kg	1	12/3/2004

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H - Samples exceeding holding time

Results are wet unless otherwise specified

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Advanced Technology Laboratories  
 3275 Walnut Avenue  
 Signal Hill, CA 90755  
 Tel: 562 989-4045  
 Fax: 562 989-4040

# Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: MB-20458	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: ICP6_041206A						
Client ID: ZZZZZ	Batch ID: 20458	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 12/6/2004	SeqNo: 646006						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: LCS-20458	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: ICP6_041206A						
Client ID: ZZZZZ	Batch ID: 20458	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 12/6/2004	SeqNo: 646008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.41	2.0	50	0	94.8	80	120	0	0		
Arsenic	46.14	1.0	50	0	92.3	80	120	0	0		
Barium	46.54	1.0	50	0	93.1	80	120	0	0		
Beryllium	47.28	1.0	50	0	94.6	80	120	0	0		
Cadmium	46.24	1.0	50	0	92.5	80	120	0	0		
Chromium	46.12	1.0	50	0	92.2	80	120	0	0		
Cobalt	44.39	1.0	50	0	88.8	80	120	0	0		
Copper	46.69	2.0	50	0	93.4	80	120	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

# ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: LCS-20458	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: ICP6_041206A						
Client ID: ZZZZZ	Batch ID: 20458	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 12/8/2004	SeqNo: 646008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	44.11	1.0	50	0	88.2	80	120	0	0		
Molybdenum	47.08	1.0	50	0	94.2	80	120	0	0		
Nickel	44.42	1.0	50	0	88.8	80	120	0	0		
Selenium	47.2	1.0	50	0	94.4	80	120	0	0		
Silver	46.68	1.0	50	0	93.4	80	120	0	0		
Thallium	45.44	1.0	50	0	90.9	80	120	0	0		
Vanadium	48.08	1.0	50	0	96.2	80	120	0	0		
Zinc	44.18	1.0	50	0	88.4	80	120	0	0		

Sample ID: 072617-022GMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: ICP6_041206A						
Client ID: T3-2-2	Batch ID: 20458	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 12/6/2004	SeqNo: 646124						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	88.74	1.0	125	0	71	23	118	0	0		
Arsenic	103.5	1.0	125	0.9116	82	64	111	0	0		
Barium	141.7	1.0	125	47.32	75.5	36	146	0	0		
Beryllium	102.8	1.0	125	0	82.2	50	120	0	0		
Cadmium	101.3	1.0	125	0	81.1	62	107	0	0		
Chromium	108.5	1.0	125	6.765	81.4	63	119	0	0		
Cobalt	102.2	1.0	125	3.71	78.8	63	111	0	0		
Copper	117.3	1.0	125	7.288	88	58	136	0	0		
Lead	98.35	1.0	125	1.941	77.1	47	125	0	0		
Molybdenum	105	1.0	125	0	84	63	116	0	0		
Nickel	103.3	1.0	125	5.359	78.4	57	116	0	0		
Selenium	98.18	1.0	125	0	78.5	47	118	0	0		
Silver	100.8	1.0	125	0	80.6	48	125	0	0		
Thallium	95.65	1.0	125	0	76.5	49	116	0	0		
Vanadium	120.2	1.0	125	11.77	86.7	65	122	0	0		
Zinc	108.2	1.0	125	14.74	74.7	36	140	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
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 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time





CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: 072617-022GMSD	SampleType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: ICP6_041206A						
Client ID: T3-2-2	Batch ID: 20458	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 12/6/2004	SeqNo: 646125						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	91.01	1.0	125	0	72.8	23	118	88.74	2.52	20	
Arsenic	104.9	1.0	125	0.9116	83.2	64	111	103.5	1.41	20	
Barium	149.2	1.0	125	47.32	81.5	36	146	141.7	5.15	20	
Beryllium	104.4	1.0	125	0	83.6	50	120	102.8	1.60	20	
Cadmium	102.7	1.0	125	0	82.1	62	107	101.3	1.34	20	
Chromium	110.3	1.0	125	6.765	82.8	63	119	108.5	1.66	20	
Cobalt	104	1.0	125	3.71	80.3	63	111	102.2	1.78	20	
Copper	119.5	1.0	125	7.288	89.8	58	136	117.3	1.84	20	
Lead	100.5	1.0	125	1.941	78.9	47	125	98.35	2.18	20	
Molybdenum	107	1.0	125	0	85.6	63	116	105	1.85	20	
Nickel	104.9	1.0	125	5.359	79.6	57	116	103.3	1.48	20	
Selenium	100.3	1.0	125	0	80.2	47	118	98.18	2.14	20	
Silver	102.8	1.0	125	0	82.2	48	125	100.8	2.00	20	
Thallium	97.8	1.0	125	0	78.2	49	116	95.65	2.22	20	
Vanadium	122.2	1.0	125	11.77	88.3	65	122	120.2	1.64	20	
Zinc	112.4	1.0	125	14.74	78.1	36	140	108.2	3.83	20	

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 Calculations are based on raw values

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CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 7471\_S

Sample ID: MB-20456	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: AA1_041206A						
Client ID: ZZZZ	Batch ID: 20456	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 12/6/2004	SeqNo: 645985						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.10									

Sample ID: LCS-20456	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: AA1_041206A						
Client ID: ZZZZ	Batch ID: 20456	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 12/6/2004	SeqNo: 645984						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	2.225	0.10	2.08	0	107	80	120	0	0		

Sample ID: 072646-001AMS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: AA1_041206A						
Client ID: ZZZZ	Batch ID: 20456	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 12/6/2004	SeqNo: 645982						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8158	0.10	0.83	0.03322	94.3	62	146	0	0		

Sample ID: 072646-001AMSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 12/6/2004	Run ID: AA1_041206A						
Client ID: ZZZZ	Batch ID: 20456	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 12/6/2004	SeqNo: 645983						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.8107	0.10	0.83	0.03322	93.7	62	146	0.8158	0.624	30	

Qualifiers: ND - Not Detected at the Reporting Limit  
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Calculations are based on raw values

DO - Surrogate dilute out  
H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_S\_G 5035P

Sample ID: E120104MB	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041201A						
Client ID: ZZZZZ	Batch ID: E04VS342	TestNo: EPA 8015B(M)		Analysis Date: 12/1/2004	SeqNo: 644190						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	87.98	0	100	0	88	27	135	0	0		

Sample ID: E120204MB2	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041202B						
Client ID: ZZZZ	Batch ID: E04V8344	TestNo: EPA 8015B(M)		Analysis Date: 12/2/2004	SeqNo: 645181						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	90.48	0	100	0	90.5	27	135	0	0		

Sample ID: E120104LC	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041201A						
Client ID: ZZZZ	Batch ID: E04VS342	TestNo: EPA 8015B(M)		Analysis Date: 12/1/2004	SeqNo: 644194						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.699	1.0	5	0	94	76	116	0	0		
Surr: Bromofluorobenzene (FID)	112.5	0	100	0	113	27	135	0	0		

Sample ID: E120204LC2	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041202B						
Client ID: ZZZZZ	Batch ID: E04VS344	TestNo: EPA 8015B(M)		Analysis Date: 12/3/2004	SeqNo: 645197						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	4.309	1.0	5	0	86.2	76	116	0	0		
Surr: Bromofluorobenzene (FID)	118.2	0	100	0	118	27	135	0	0		

Sample ID: 072627-006AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041201A						
Client ID: ZZZZ	Batch ID: E04VS342	TestNo: EPA 8015B(M)		Analysis Date: 12/1/2004	SeqNo: 644192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO	409.8	50	250	343.4	26.5	27	137	0	0		S
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Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_S\_G 5035P

Sample ID: 072627-006AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041201A						
Client ID: ZZZZ	Batch ID: E04VS342	TestNo: EPA 8015B(M		Analysis Date: 12/1/2004	SeqNo: 644192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Bromofluorobenzene (FID) 4749 0 5000 0 95 27 135 0 0

Sample ID: 072648-024AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041202B						
Client ID: ZZZZZ	Batch ID: E04VS344	TestNo: EPA 8015B(M		Analysis Date: 12/3/2004	SeqNo: 645199						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO 2.789 1.0 5 0 55.8 27 137 0 0  
 Surr: Bromofluorobenzene (FID) 95.45 0 100 0 95.4 27 135 0 0

Sample ID: 072627-006AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041201A						
Client ID: ZZZZZ	Batch ID: E04VS342	TestNo: EPA 8015B(M		Analysis Date: 12/1/2004	SeqNo: 644193						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO 476.8 50 250 343.4 53.3 27 137 409.8 15.1 30  
 Surr: Bromofluorobenzene (FID) 6084 0 5000 0 122 27 135 0 0

Sample ID: 072648-024AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_041202B						
Client ID: ZZZZZ	Batch ID: E04VS344	TestNo: EPA 8015B(M		Analysis Date: 12/3/2004	SeqNo: 645196						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

GRO 3.859 1.0 5 0 77.2 27 137 2.789 32.2 30 R  
 Surr: Bromofluorobenzene (FID) 113.4 0 100 0 113 27 135 0 0

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 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R041201MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 644217						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									

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CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R041201MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 844217						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
Methylene chloride	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.29	5.0	50	0	96.6	61	164	0	0		
Surr: 4-Bromofluorobenzene	45.49	5.0	50	0	91	80	123	0	0		
Surr: Dibromofluoromethane	50.54	5.0	50	0	101	78	141	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
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 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R041201MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 644217						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: R041201LC1	SampType: LCS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 644214						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	101	5.0	100	0	101	63	127	0	0		
Benzene	110.2	5.0	100	0	110	88	126	0	0		
Chlorobenzene	116.4	5.0	100	0	116	91	133	0	0		
Toluene	111.4	5.0	100	0	111	87	126	0	0		
Trichloroethene	112.8	5.0	100	0	113	86	134	0	0		
Surr: 1,2-Dichloroethane-d4	40.66	5.0	50	0	81.3	61	164	0	0		
Surr: 4-Bromofluorobenzene	50.85	5.0	50	0	102	80	123	0	0		
Surr: Dibromofluoromethane	45.48	5.0	50	0	91	78	141	0	0		
Surr: Toluene-d8	51.9	5.0	50	0	104	66	123	0	0		

Sample ID: R041201MB1MS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 644215						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	110.8	5.0	100	0	111	51	128	0	0		
Benzene	122	5.0	100	0	122	65	136	0	0		
Chlorobenzene	128.5	5.0	100	0	128	52	152	0	0		
Toluene	122.4	5.0	100	0	122	56	142	0	0		
Trichloroethene	125.5	5.0	100	0	126	54	155	0	0		
Surr: 1,2-Dichloroethane-d4	43.32	5.0	50	0	86.6	61	164	0	0		
Surr: 4-Bromofluorobenzene	49.47	5.0	50	0	98.9	80	123	0	0		
Surr: Dibromofluoromethane	46.59	5.0	50	0	93.2	78	141	0	0		
Surr: Toluene-d8	51.07	5.0	50	0	102	86	123	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R041201MB1MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_041201A						
Client ID: ZZZZZ	Batch ID: R04VS193	TestNo: EPA 8260B		Analysis Date: 12/1/2004	SeqNo: 644216						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	108.9	5.0	100	0	109	51	128	110.8	1.71	30	
Benzene	120.6	5.0	100	0	121	65	136	122	1.09	30	
Chlorobenzene	129.2	5.0	100	0	129	52	152	128.5	0.574	30	
Toluene	120.9	5.0	100	0	121	56	142	122.4	1.27	30	
Trichloroethene	123.3	5.0	100	0	123	54	155	125.5	1.78	30	
Surr: 1,2-Dichloroethane-d4	42.5	5.0	50	0	85	61	164	0	0	30	
Surr: 4-Bromofluorobenzene	51.6	5.0	50	0	103	80	123	0	0	30	
Surr: Dibromofluoromethane	48.9	5.0	50	0	93.8	78	141	0	0	30	
Surr: Toluene-d8	50.74	5.0	50	0	101	86	123	0	0	30	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
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S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time

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CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FULL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645025						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	330									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Chrysene	ND	330									
Dibenz(a,h)anthracene	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Naphthalene	ND	330									
Phenanthrene	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2576	0	3330	0	77.4	37	103	0	0		
Surr: 2-Fluorobiphenyl	2505	0	3330	0	75.2	37	113	0	0		
Surr: 4-Terphenyl-d14	2848	0	3330	0	85.5	46	123	0	0		
Surr: Nitrobenzene-d5	2882	0	3330	0	86.5	39	108	0	0		

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS6_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645097						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	330									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time

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CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS6_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645097						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Chrysene	ND	330									
Dibenz(a,h)anthracene	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Naphthalene	ND	330									
Phenanthrene	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2630	0	3330	0	79	37	103	0	0		
Surr: 2-Fluorobiphenyl	2986	0	3330	0	89.7	37	113	0	0		
Surr: 4-Terphenyl-d14	3284	0	3330	0	98.6	46	123	0	0		
Surr: Nitrobenzene-d5	2843	0	3330	0	65.4	39	108	0	0		

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645433						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2-Methylnaphthalene	ND	330									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

Page 12 of 16

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645433						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	ND	330									
Chrysene	ND	330									
Dibenz(a,h)anthracene	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Naphthalene	ND	330									
Phenanthrene	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2548	0	3330	0	76.5	37	103	0	0		
Surr: 2-Fluorobiphenyl	2622	0	3330	0	75.7	37	113	0	0		
Surr: 4-Terphenyl-d14	3115	0	3330	0	93.5	46	123	0	0		
Surr: Nitrobenzene-d5	2920	0	3330	0	87.7	39	108	0	0		

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/6/2004	SeqNo: 645952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	330									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Chrysene	ND	330									
Dibenz(a,h)anthracene	ND	330									
Fluoranthene	ND	330									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits DO- Surrogate dilute out  
 J - Analyte detected below quantitation limits B - Analyte detected in the associated Method Blank H - Sample exceeded holding time  
 R - RPD outside accepted recovery limits Calculations are based on raw values

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: MB-20428	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/8/2004	SeqNo: 645952						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluorene	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Naphthalene	ND	330									
Phenanthrene	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2566	0	3330	0	77.1	37	103	0	0		
Surr: 2-Fluorobiphenyl	2482	0	3330	0	74.5	37	113	0	0		
Surr: 4-Terphenyl-d14	3400	0	3330	0	102	46	123	0	0		
Surr: Nitrobenzene-d5	2897	0	3330	0	87	39	108	0	0		

Sample ID: LCS-20428	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645026						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2339	330	3330	0	70.3	64	95	0	0		
Pyrene	2653	330	3330	0	79.7	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2553	0	3330	0	76.7	37	103	0	0		
Surr: 2-Fluorobiphenyl	2435	0	3330	0	73.1	37	113	0	0		
Surr: 4-Terphenyl-d14	3195	0	3330	0	96	46	123	0	0		
Surr: Nitrobenzene-d5	2965	0	3330	0	89	39	108	0	0		

Sample ID: LCS-20428	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS6_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645098						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2980	330	3330	0	89.5	64	95	0	0		
Pyrene	2752	330	3330	0	82.7	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2635	0	3330	0	79.1	37	103	0	0		
Surr: 2-Fluorobiphenyl	2974	0	3330	0	89.3	37	113	0	0		
Surr: 4-Terphenyl-d14	3343	0	3330	0	100	46	123	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO - Surrogate dilute out  
H - Sample exceeded holding time

Advanced Technology  
3275 Walnut Avenue  
Signal Hill, CA 90755  
Tel: 562 989-4045  
Fax: 562 989-4040

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: LCS-20428	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS6_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/2/2004	SeqNo: 645098						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: Nitrobenzene-d5	2813	0	3330	0	84.5	39	108	0	0		
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Sample ID: LCS-20428	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645434						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2404	330	3330	0	72.2	64	95	0	0		
Pyrene	2619	330	3330	0	78.6	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2568	0	3330	0	77.1	37	103	0	0		
Surr: 2-Fluorobiphenyl	2406	0	3330	0	72.3	37	113	0	0		
Surr: 4-Terphenyl-d14	3273	0	3330	0	98.3	46	123	0	0		
Surr: Nitrobenzene-d5	2953	0	3330	0	88.7	39	108	0	0		

Sample ID: LCS-20428	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/6/2004	SeqNo: 645953						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2346	330	3330	0	70.5	64	95	0	0		
Pyrene	2693	330	3330	0	80.9	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2541	0	3330	0	76.3	37	103	0	0		
Surr: 2-Fluorobiphenyl	2414	0	3330	0	72.5	37	113	0	0		
Surr: 4-Terphenyl-d14	3217	0	3330	0	96.6	46	123	0	0		
Surr: Nitrobenzene-d5	2991	0	3330	0	89.8	39	108	0	0		

Sample ID: mb-20428MS	SampType: MS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645137						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2443	330	3330	0	73.4	64	95	0	0		
Pyrene	2719	330	3330	0	81.7	63	100	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits  
S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values  
DO- Surrogate dilute out  
H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: mb-20428MS	SampType: MS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645137						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 1,2-Dichlorobenzene-d4	2519	0	3330	0	75.7	37	103	0	0		
Surr: 2-Fluorobiphenyl	2400	0	3330	0	72.1	37	113	0	0		
Surr: 4-Terphenyl-d14	3203	0	3330	0	96.2	46	123	0	0		
Surr: Nitrobenzene-d5	2962	0	3330	0	89.9	39	108	0	0		

Sample ID: mb-20428MSD	SampType: MSD	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 12/2/2004	Run ID: MS7_041202A						
Client ID: ZZZZ	Batch ID: 20428	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 12/3/2004	SeqNo: 645138						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	2085	330	3330	0	62.6	64	95	2443	15.8	30	S
Pyrene	2324	330	3330	0	69.8	63	100	2719	15.7	30	
Surr: 1,2-Dichlorobenzene-d4	1645	0	3330	0	49.4	37	103	0	0	0	
Surr: 2-Fluorobiphenyl	1728	0	3330	0	51.9	37	113	0	0	0	
Surr: 4-Terphenyl-d14	2410	0	3330	0	72.4	46	123	0	0	0	
Surr: Nitrobenzene-d5	1960	0	3330	0	58.8	39	108	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: HC\_S\_SVOA

Sample ID: MB-20414	SampType: MBLK	TestCode: HC_S_SVOA	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B (LUFT)		Analysis Date: 12/5/2004	SeqNo: 646173						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C12

ND

10

T/R Hydrocarbons: C13-C15

ND

10

T/R Hydrocarbons: C16-C22

ND

10

T/R Hydrocarbons: C23-C32

ND

10

T/R Hydrocarbons: &gt;C32

ND

10

Surr: p-Terphenyl

85.52

10

80

0

107

60

129

0

0

Sample ID: MB-20414	SampType: MBLK	TestCode: HC_S_SVOA	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B (LUFT)		Analysis Date: 12/7/2004	SeqNo: 646826						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

T/R Hydrocarbons: C10-C12

ND

10

T/R Hydrocarbons: C13-C15

ND

10

T/R Hydrocarbons: C16-C22

ND

10

T/R Hydrocarbons: C23-C32

ND

10

T/R Hydrocarbons: &gt;C32

ND

10

Surr: p-Terphenyl

99.33

10

80

0

124

60

129

0

0

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
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S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time

## Advanced Technology Laboratories

Date: 08-Dec-04

CLIENT: Ninyo & Moore  
 Work Order: 072617  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

BatchID: 20414

Sample ID: LCS-20414	SampleType: LCS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M) (LUFT)		Analysis Date: 12/1/2004	SeqNo: 643683						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1060	10	1000	0	106	73	125	0	0		
Surr: p-Terphenyl	91.61	0	80	0	115	60	129	0	0		

Sample ID: LCS-20414	SampleType: LCS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M) (LUFT)		Analysis Date: 12/5/2004	SeqNo: 646172						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	975.3	10	1000	0	97.5	73	125	0	0		
Surr: p-Terphenyl	84.32	0	80	0	105	60	129	0	0		

Sample ID: LCS-20414	SampleType: LCS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M) (LUFT)		Analysis Date: 12/7/2004	SeqNo: 646825						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1014	10	1000	0	101	73	125	0	0		
Surr: p-Terphenyl	102.6	0	80	0	126	60	129	0	0		

Sample ID: 072627-006AMS	SampleType: MS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M) (LUFT)		Analysis Date: 12/1/2004	SeqNo: 643684						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	3783	20	1000	2620	116	70	128	0	0		
Surr: p-Terphenyl	62.5	0	80	0	78.1	60	129	0	0		

Sample ID: 072627-006AMSD	SampleType: MSD	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M) (LUFT)		Analysis Date: 12/1/2004	SeqNo: 643685						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

S - Spike/Surrogate outside limits due to matrix interference

B - Analyte detected in the associated Method Blank

Calculations are based on raw values

DO - Surrogate diluted out

H - Sample exceeded holding time

Page 1 of 2



Advanced Technology Laboratories  
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Fax: 562 989-4040

CLIENT: Ninyo & Moore  
Work Order: 072617  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

BatchID: 20414

Sample ID: 072627-006AMSD	SampType: MSD	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 12/1/2004	Run ID: GC7_041130B						
Client ID: ZZZZ	Batch ID: 20414	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 12/1/2004	SeqNo: 643685						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	3439	20	1000	2620	81.9	70	128	3783	9.54	30	
Surr: p-Terphenyl	55.02	0	60	0	68.8	60	129	0	0	30	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike/Surrogate outside limits due to matrix interference  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO - Surrogate diluted out  
H - Sample exceeded holding time

Page 2 of 2

# CHAIN OF CUSTODY RECORD

Pg 1 of 3

**Advanced Technology Laboratories**  
3275 Walnut Avenue  
Signal Hill, CA 90755  
(562) 989-4045 • Fax (562) 989-4040

## FOR LABORATORY USE ONLY:

P.O.#:

Logged By: *PR*

Date: *11/30/04*

### Method of Transport

Client ☒  
ATL ☐  
CA OverN ☐  
FEDEX ☐  
Other: \_\_\_\_\_

### Sample Condition Upon Receipt

1. CHILLED ☒ N ☐ 4. SEALED ☐ N ☒  
2. HEADSPACE (VOA) ☐ N ☐ 5. # OF SPLS MATCH COC ☐ N ☐  
3. CONTAINER INTACT ☒ N ☐ 6. PRESERVED ☐ N ☒

Client: \_\_\_\_\_ Address: \_\_\_\_\_ TEL: ( ) \_\_\_\_\_  
Attn: *Ninyo & Moore* City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ FAX: ( ) \_\_\_\_\_

Project Name: *Bloomfield II* Project #: *205372005* Sampler: (Printed Name) *Paul Roberts* (Signature) *Paul Roberts*

Relinquished by: (Signature and Printed Name) *Paul Roberts* Date: *11-30-04* Time: *3:35* Received by: (Signature and Printed Name) *CH* Date: *11/30/04* Time: *1555*  
Relinquished by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Relinquished by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

I hereby authorize ATL to perform the work indicated below:  
Project Mgr./Submitter: *Paul Roberts* *11-30-04*  
Send Report To: \_\_\_\_\_  
Attn: \_\_\_\_\_  
Co: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Bill To: \_\_\_\_\_  
Attn: \_\_\_\_\_  
Co: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Special Instructions/Comments: \_\_\_\_\_

**Sample/Records - Archival & Disposal**  
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.  
**Storage Fees (applies when storage is requested):**  
• Sample : \$2.00 / sample / mo (after 45 days)  
• Records : \$1.00 / ATL workorder / mo (after 1 year)

ITEM	LAB USE ONLY:		Sample Description				SPECIFY APPROPRIATE MATRIX													Container(s)		PRESERVATION	REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Batch #:	Lab No.	Sample I.D. / Location	Date	Time	ATL (Pre-Test)	ATL (Post)	ATL (VOCs)	ATL (PAHs)	ATL (PCBs)	ATL (Pesticides)	ATL (Metals)	ATL (Organics)	ATL (Inorganics)	ATL (Other)	TAT	#	Type																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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• TAT starts 8 a.m. following day if samples received after 3 p.m.  
TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays  
Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Bedlar G=Glass P=Plastic M=Metal  
Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C Z=Zn(Ac)<sub>2</sub> O=NaOH T=Na<sub>2</sub>SiO<sub>3</sub>

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.

# CHAIN OF CUSTODY RECORD

Pg 2 of 3



**Advanced Technology  
Laboratories**

3275 Walnut Avenue  
Signal Hill, CA 90755  
(562) 989-4045 • Fax (562) 989-4040

## FOR LABORATORY USE ONLY:

P.O.#:

Logged By: *GR*

Date: *11/30/04*

### Method of Transport

Client ☒  
ATL ☐  
CA OverN ☐  
FEDEX ☐  
Other: ☐

### Sample Condition Upon Receipt

1. CHILLED Y ☒ N ☐ 4. SEALED Y ☐ N ☒  
2. HEADSPACE (VOA) Y ☐ N ☒ 5. # OF SPLS MATCH COC Y ☒ N ☐  
3. CONTAINER INTACT Y ☒ N ☐ 6. PRESERVED Y ☐ N ☒

Client:

Address:

TEL: ( )

Attn: *Nevo Moore*

City:

State:

Zip Code:

FAX: ( )

Project Name: *Biofield II* Project #: *205372005*

Sampler: (Printed Name)

(Signature)

Relinquished by: (Signature and Printed Name)

Date: *11-30-04*

Time: *3:35*

Received by: (Signature and Printed Name)

Date: *11/30/04*

Time: *15:35*

Relinquished by: (Signature and Printed Name)

Date:

Time:

Received by: (Signature and Printed Name)

Date:

Time:

Relinquished by: (Signature and Printed Name)

Date:

Time:

Received by: (Signature and Printed Name)

Date:

Time:

I hereby authorize ATL to perform the work indicated below:

Project Mgr./Submitter:

Send Report To:

Attn:

Co:

Address:

City:

State:

Zip:

Bill To:

Attn:

Co:

Address:

City:

State:

Zip:

Special Instructions/Comments:

### Sample/Records - Archival & Disposal

Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

### Storage Fees (applies when storage is requested):

- Sample: \$2.00 / sample / mo (after 45 days)
- Records: \$1.00 / ATL worker / mo (after 1 year)

ITEM	LAB USE ONLY:		Sample Description		
	Batch #:	Lab No.	Sample I.D. / Location	Date	Time
	<i>AT2017-011</i>		<i>T2-1-5</i>	<i>11/30</i>	
	<i>- 012</i>		<i>T2-1-10</i>		
	<i>- 013</i>		<i>T2-2-2</i>		
	<i>- 014</i>		<i>T2-2-5</i>		
	<i>- 015</i>		<i>T2-2-10</i>		
	<i>- 016</i>		<i>T2-3-2</i>		
	<i>- 017</i>		<i>T2-3-5</i>		
	<i>- 018</i>		<i>T2-3-10</i>		
	<i>- 019</i>		<i>T3-1-2</i>		
	<i>- 020</i>		<i>T3-1-5</i>		

Circle or Add Analysis(es) Requested

Requested

ATL (Pesticide)

ATL (PCB)

ATL (Metals)

ATL (BPA)

ATL (Total Metals)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

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ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

ATL (Total PCB)

### SPECIFY APPROPRIATE MATRIX

Container(s)

TAT # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

ATL # Type

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ATL # Type

ATL # Type

ATL # Type

### QA/QC

RTME ☐

CT ☐

SWRCB ☐

Logcode

OTHER

REMARKS

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight  $\leq 24$  hr

B= Emergency Next workday

C= Critical 2 Workdays

D= Urgent 3 Workdays

E= Routine 7 Workdays

Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C  
Z=Zn(AC) O=NaOH T=Na<sub>2</sub>SO<sub>4</sub>

Container Types: T=Tube V=VOA L=Liter P=Pin J=Jar B=Bedlar G=Glass P=Plastic M=Metal

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.





14 December 2004

Paul Roberts  
Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine, CA 92618

RE: Bloomfield 2

Work Order No.: 0412057

Attached are the results of the analyses for samples received by the laboratory on 12/02/04 09:10.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.  
If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth  
Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS),  
Environmental Laboratory Accreditation Program (ELAP) No. 2320.



Ninyo & Moore - Irvine  
75 Goddard Suite 200  
Irvine CA, 92618

Project: **Bloomfield 2**  
Project Number: **205372005**  
Project Manager: **Paul Roberts**

Reported:  
12/14/04 16:14

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4-1-2	0412057-01	Soil	12/01/04 00:00	12/02/04 09:10
4-2-2	0412057-04	Soil	12/01/04 00:00	12/02/04 09:10
P1-1-2.5	0412057-07	Soil	12/01/04 00:00	12/02/04 09:10
1-2-2.5	0412057-08	Soil	12/01/04 00:00	12/02/04 09:10
P1-3-2	0412057-09	Soil	12/01/04 00:00	12/02/04 09:10
1-4-1.5	0412057-10	Soil	12/01/04 00:00	12/02/04 09:10
1-5-1.5	0412057-11	Soil	12/01/04 00:00	12/02/04 09:10
P1-6-1.5	0412057-12	Soil	12/01/04 00:00	12/02/04 09:10

#### CASE NARRATIVE

**SAMPLE RECEIPT:** Samples were received intact, at 4 °C, and accompanied by chain of custody documentation.

**RESERVATION:** Samples requiring preservation were verified prior to sample preparation and analysis.

**HOLDING TIMES:** All holding times were met, unless otherwise noted in the report with data qualifiers.

**QA/QC CRITERIA:** All quality objective criteria were met, except as noted in the report with data qualifiers.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Ninyo & Moore - Irvine  
175 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Metals by EPA 6000/7000 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
T4-1-2 (0412057-01) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	6.4	1.7	"	"	"	"	"	"	
Barium	220	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	ND	0.51	"	"	"	"	12/09/04	"	
Cobalt	14	2.2	"	"	"	"	12/13/04	"	
Chromium	32	0.98	"	"	"	"	12/09/04	"	
Copper	26	2.2	"	"	"	"	12/13/04	"	
Mercury	ND	0.16	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	22	0.79	"	"	"	"	"	"	
Lead	14	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	55	0.73	"	"	"	"	"	"	
Zinc	55	1.3	"	"	"	"	12/13/04	"	

### T4-2-2 (0412057-04) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	8.2	1.7	"	"	"	"	"	"	
Barium	210	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	ND	0.51	"	"	"	"	12/09/04	"	
Cobalt	15	2.2	"	"	"	"	12/13/04	"	
Chromium	36	0.98	"	"	"	"	12/09/04	"	
Copper	29	2.2	"	"	"	"	12/13/04	"	
Mercury	ND	0.16	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	25	0.79	"	"	"	"	"	"	
Lead	6.0	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	61	0.73	"	"	"	"	"	"	
Zinc	58	1.3	"	"	"	"	12/13/04	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Metals by EPA 6000/7000 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Reporting			Dilution	Batch	Prepared	Analyzed	Method	Notes
	Result	Limit	Units						
P1-1-2.5 (0412057-07) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10									
Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	13	1.7	"	"	"	"	"	"	
Barium	220	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	0.75	0.51	"	"	"	"	12/09/04	"	
Cobalt	13	2.2	"	"	"	"	12/13/04	"	
Chromium	36	0.98	"	"	"	"	12/09/04	"	
Copper	1500	2.2	"	"	"	"	12/13/04	"	
Mercury	0.22	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	33	0.79	"	"	"	"	"	"	
Lead	200	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	57	0.73	"	"	"	"	"	"	
Zinc	440	1.3	"	"	"	"	12/13/04	"	

### P1-2-2.5 (0412057-08) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	12	1.7	"	"	"	"	"	"	
Barium	210	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	0.79	0.51	"	"	"	"	12/09/04	"	
Cobalt	14	2.2	"	"	"	"	12/13/04	"	
Chromium	34	0.98	"	"	"	"	12/09/04	"	
Copper	47	2.2	"	"	"	"	12/13/04	"	
Mercury	ND	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	25	0.79	"	"	"	"	"	"	
Lead	85	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	55	0.73	"	"	"	"	"	"	
Zinc	380	1.3	"	"	"	"	12/13/04	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Metals by EPA 6000/7000 Series Methods**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>P1-3-2 (0412057-09) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	15	1.7	"	"	"	"	"	"	
Barium	210	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	ND	0.51	"	"	"	"	12/09/04	"	
Cobalt	14	2.2	"	"	"	"	12/13/04	"	
Chromium	34	0.98	"	"	"	"	12/09/04	"	
Copper	33	2.2	"	"	"	"	12/13/04	"	
Mercury	0.27	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	26	0.79	"	"	"	"	"	"	
Lead	61	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	60	0.73	"	"	"	"	"	"	
Zinc	88	1.3	"	"	"	"	12/13/04	"	

**P1-4-1.5 (0412057-10) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10**

Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B	
Arsenic	13	1.7	"	"	"	"	"	"	
Barium	220	3.3	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	
Cadmium	ND	0.51	"	"	"	"	12/09/04	"	
Cobalt	13	2.2	"	"	"	"	12/13/04	"	
Chromium	32	0.98	"	"	"	"	12/09/04	"	
Copper	31	2.2	"	"	"	"	12/13/04	"	
Mercury	ND	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A	
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B	
Nickel	24	0.79	"	"	"	"	"	"	
Lead	74	1.3	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	
Thallium	ND	1.5	"	"	"	"	"	"	
Vanadium	54	0.73	"	"	"	"	"	"	
Zinc	130	1.3	"	"	"	"	12/13/04	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Metals by EPA 6000/7000 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
P1-5-1.5 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10										
Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B		
Arsenic	25	1.7	"	"	"	"	"	"	"	
Barium	260	3.3	"	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	"	
Cadmium	0.68	0.51	"	"	"	"	12/09/04	"	"	
Cobalt	14	2.2	"	"	"	"	12/13/04	"	"	
Chromium	39	0.98	"	"	"	"	12/09/04	"	"	
Copper	42	2.2	"	"	"	"	12/13/04	"	"	
Mercury	ND	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A		
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B		
Nickel	28	0.79	"	"	"	"	"	"	"	
Lead	230	1.3	"	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	"	
Thallium	ND	1.5	"	"	"	"	"	"	"	
Vanadium	57	0.73	"	"	"	"	"	"	"	
Zinc	310	1.3	"	"	"	"	12/13/04	"	"	

### P1-6-1.5 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Silver	ND	0.80	mg/kg	1	B4L0906	12/09/04	12/09/04	EPA 6010B		
Arsenic	14	1.7	"	"	"	"	"	"	"	
Barium	230	3.3	"	"	"	"	"	"	"	
Beryllium	ND	0.68	"	"	"	"	12/13/04	"	"	
Cadmium	ND	0.51	"	"	"	"	12/09/04	"	"	
Cobalt	10	2.2	"	"	"	"	12/13/04	"	"	
Chromium	27	0.98	"	"	"	"	12/09/04	"	"	
Copper	32	2.2	"	"	"	"	12/13/04	"	"	
Mercury	ND	0.18	"	"	B4L0907	12/09/04	12/10/04	EPA 7471A		
Molybdenum	ND	1.7	"	"	B4L0906	12/09/04	12/09/04	EPA 6010B		
Nickel	24	0.79	"	"	"	"	"	"	"	
Lead	120	1.3	"	"	"	"	"	"	"	
Antimony	ND	1.6	"	"	"	"	12/13/04	"	"	
Selenium	ND	1.9	"	"	"	"	12/09/04	"	"	
Thallium	ND	1.5	"	"	"	"	"	"	"	
Vanadium	42	0.73	"	"	"	"	"	"	"	
Zinc	190	1.3	"	"	"	"	12/13/04	"	"	

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Ninyo & Moore - Irvine  
75 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>T4-1-2 (0412057-01) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.050	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	118 %	35-130			"	"	"	"	
<b>T4-2-2 (0412057-04) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.045	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	119 %	35-130			"	"	"	"	
<b>T4-1-2.5 (0412057-07) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.088	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	115 %	35-130			"	"	"	"	
<b>P1-2-2.5 (0412057-08) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.076	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	119 %	35-130			"	"	"	"	
<b>P1-3-2 (0412057-09) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.060	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	119 %	35-130			"	"	"	"	
<b>P1-4-1.5 (0412057-10) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.068	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	116 %	35-130			"	"	"	"	
<b>P1-5-1.5 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Gasoline Range Hydrocarbons (C4-C12)	ND	0.056	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene	118 %	35-130			"	"	"	"	

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Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
P1-6-1.5 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Gasoline Range Hydrocarbons (4-C12)	ND	0.066	mg/kg	1	B4L0505	12/05/04	12/05/04	EPA 8015B	
Surrogate: a,a,a-Trifluorotoluene		116 %	35-130		"	"	"	"	

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Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID

Sierra Analytical Labs, Inc.

Sample	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
T4-1-2 (0412057-01) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
MC < C8	ND	1.0	mg/kg	1	B4L0908	12/06/04	12/09/04	EPA 8015B	
C8 <= HC < C9	ND	1.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"	
C18 <= HC < C20	1.6	1.0	"	"	"	"	"	"	
C20 <= HC < C24	18	1.0	"	"	"	"	"	"	
C24 <= HC < C28	31	1.0	"	"	"	"	"	"	
C28 <= HC < C32	24	1.0	"	"	"	"	"	"	
C32 >= C32	ND	1.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	74	5.0	"	"	"	"	"	"	
surrogate: o-Terphenyl 131 % 50-150 " " " "									
T4-2-2 (0412057-04) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
MC < C8	ND	1.0	mg/kg	1	B4L0908	12/06/04	12/09/04	EPA 8015B	
C8 <= HC < C9	ND	1.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"	
C18 <= HC < C20	ND	1.0	"	"	"	"	"	"	
C20 <= HC < C24	4.0	1.0	"	"	"	"	"	"	
C24 <= HC < C28	6.6	1.0	"	"	"	"	"	"	
C28 <= HC < C32	3.2	1.0	"	"	"	"	"	"	
C32 >= C32	ND	1.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	14	5.0	"	"	"	"	"	"	
surrogate: o-Terphenyl 107 % 50-150 " " " "									

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Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-1-2.5 (0412057-07) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
HC < C8	ND	5.0	mg/kg	5	B4L0908	12/06/04	12/09/04	EPA 8015B	
C1 <= HC < C9	ND	5.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	5.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	5.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	5.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	5.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	5.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	5.0	"	"	"	"	"	"	
C18 <= HC < C20	ND	5.0	"	"	"	"	"	"	
C20 <= HC < C24	220	5.0	"	"	"	"	"	"	
C24 <= HC < C28	420	5.0	"	"	"	"	"	"	
C28 <= HC < C32	480	5.0	"	"	"	"	"	"	
HC >= C32	ND	5.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	1100	25	"	"	"	"	"	"	

surrogate: o-Terphenyl % 50-150 " " " " S-03

### P1-2-2.5 (0412057-08) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

HC < C8	ND	1.0	mg/kg	1	B4L0908	12/06/04	12/09/04	EPA 8015B	
C1 <= HC < C9	ND	1.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"	
C18 <= HC < C20	4.5	1.0	"	"	"	"	"	"	
C20 <= HC < C24	54	1.0	"	"	"	"	"	"	
C24 <= HC < C28	140	1.0	"	"	"	"	"	"	
C28 <= HC < C32	160	1.0	"	"	"	"	"	"	
HC >= C32	1.6	1.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	360	5.0	"	"	"	"	"	"	

surrogate: o-Terphenyl 133 % 50-150 " " " " "

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Project: **Bloomfield 2**  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
P1-3-2 (0412057-09) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
MC < C8	ND	1.0	mg/kg	1	B410908	12/06/04	12/09/04	EPA 8015B		
8 <= HC < C9	ND	1.0	"	"	"	"	"	"		
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"		
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"		
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"		
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"		
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"		
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"		
18 <= HC < C20	7.2	1.0	"	"	"	"	"	"		
C20 <= HC < C24	54	1.0	"	"	"	"	"	"		
C24 <= HC < C28	110	1.0	"	"	"	"	"	"		
C28 <= HC < C32	110	1.0	"	"	"	"	"	"		
C32 >= C32	8.0	1.0	"	"	"	"	"	"		
Total Petroleum Hydrocarbons (C7-C36)	290	5.0	"	"	"	"	"	"		

<b>P1-4-1.5 (0412057-10) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>										
<b>rrrogate: o-Terphenyl</b>										
		92.0 %	50-150							
MC < C8	ND	1.0	mg/kg	1	B410908	12/06/04	12/09/04	EPA 8015B		
1 <= HC < C9	ND	1.0	"	"	"	"	"	"		
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"		
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"		
1 <= HC < C12	ND	1.0	"	"	"	"	"	"		
2 <= HC < C14	ND	1.0	"	"	"	"	"	"		
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"		
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"		
8 <= HC < C20	8.5	1.0	"	"	"	"	"	"		
20 <= HC < C24	50	1.0	"	"	"	"	"	"		
C24 <= HC < C28	170	1.0	"	"	"	"	"	"		
28 <= HC < C32	140	1.0	"	"	"	"	"	"		
C >= C32	10	1.0	"	"	"	"	"	"		
<b>Total Petroleum Hydrocarbons (C7-C36)</b>	<b>370</b>	5.0	"	"	"	"	"	"		
<b>rrrogate: o-Terphenyl</b>										
		88.0 %	50-150							

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Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-5-1.5 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
HC < C8	ND	1.0	mg/kg	1	B4L0908	12/06/04	12/09/04	EPA 8015B	
C8 <= HC < C9	ND	1.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"	
C18 <= HC < C20	14	1.0	"	"	"	"	"	"	
C20 <= HC < C24	35	1.0	"	"	"	"	"	"	
C24 <= HC < C28	160	1.0	"	"	"	"	"	"	
C28 <= HC < C32	140	1.0	"	"	"	"	"	"	
C32 <= HC < C36	2.9	1.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	360	5.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		90.7 %	50-150		"	"	"	"	
P1-6-1.5 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
HC < C8	ND	1.0	mg/kg	1	B4L0908	12/06/04	12/09/04	EPA 8015B	
C8 <= HC < C9	ND	1.0	"	"	"	"	"	"	
C9 <= HC < C10	ND	1.0	"	"	"	"	"	"	
C10 <= HC < C11	ND	1.0	"	"	"	"	"	"	
C11 <= HC < C12	ND	1.0	"	"	"	"	"	"	
C12 <= HC < C14	ND	1.0	"	"	"	"	"	"	
C14 <= HC < C16	ND	1.0	"	"	"	"	"	"	
C16 <= HC < C18	ND	1.0	"	"	"	"	"	"	
C18 <= HC < C20	5.7	1.0	"	"	"	"	"	"	
C20 <= HC < C24	91	1.0	"	"	"	"	"	"	
C24 <= HC < C28	160	1.0	"	"	"	"	"	"	
C28 <= HC < C32	190	1.0	"	"	"	"	"	"	
C32 <= HC < C36	7.6	1.0	"	"	"	"	"	"	
Total Petroleum Hydrocarbons (C7-C36)	450	5.0	"	"	"	"	"	"	
Surrogate: o-Terphenyl		101 %	50-150		"	"	"	"	

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Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
T4-1-2 (0412057-01) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10										
Benzene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B		
Bromobenzene	ND	5.0	"	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	"	
Chlorotoluene	ND	5.0	"	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"	
Chlorodifluoromethane	ND	5.0	"	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	"	

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Project: Bloomfield 2  
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Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

### Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Sample	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
13-2-2 (0412057-04) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
1,2-Dibromo-3-chloropropane	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,1-Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,1,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	

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Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# **Volatile Organic Compounds by EPA Method 8260B**

**Sierra Analytical Labs, Inc.**

Sample	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**TA-2-2 (0412057-04) Soil** Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

m,p-Xylene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Xylene	ND	5.0	"	"	"	"	"	"	"
Surrogate: Dibromofluoromethane		114 %	80-120	"	"	"	"	"	"
Surrogate: Toluene-d8		101 %	81-117	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene		101 %	74-121	"	"	"	"	"	"

**PI-1-2.5 (0412057-07) Soil** Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Benzene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Bromobenzene	ND	5.0	"	"	"	"	"	"	"
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	"
Bromoform	ND	5.0	"	"	"	"	"	"	"
Bromomethane	ND	5.0	"	"	"	"	"	"	"
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
t-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	"
Chlorobenzene	ND	5.0	"	"	"	"	"	"	"
Chloroethane	ND	5.0	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Chloromethane	ND	5.0	"	"	"	"	"	"	"
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	"
1-Chlorotoluene	ND	5.0	"	"	"	"	"	"	"
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	"
Bromomethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
1-Chlorodifluoromethane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	"

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# **Volatile Organic Compounds by EPA Method 8260B**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-1-2.5 (0412057-07) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
trans-1,3-Dichloropropene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
ethylbenzene	ND	5.0	"	"	"	"	"	"	
hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
isopropylbenzene	ND	5.0	"	"	"	"	"	"	
isopropyltoluene	ND	5.0	"	"	"	"	"	"	
ethylene chloride	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Propylbenzene	ND	5.0	"	"	"	"	"	"	
styrene	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
trichloroethene	ND	5.0	"	"	"	"	"	"	
toluene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
vinyl chloride	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		114 %	80-120	"	"	"	"	"	
Surrogate: Toluene-d8		101 %	81-117	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	74-121	"	"	"	"	"	

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Ninyo & Moore - Irvine  
 75 Goddard Suite 200  
 Irvine CA, 92618

Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

# Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P-2-2.5 (0412057-08) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Benzene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
t-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Chlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	

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Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# **Volatile Organic Compounds by EPA Method 8260B**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**P1-3-2 (0412057-09) Soil** Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

p-Xylene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Xylene	ND	5.0	"	"	"	"	"	"	"
Surrogate: Dibromofluoromethane		120 %	80-120	"	"	"	"	"	"
Surrogate: Toluene-d8		101 %	81-117	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene		106 %	74-121	"	"	"	"	"	"

**P1-4-1.5 (0412057-10) Soil** Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Benzene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
o-mobenzene	ND	5.0	"	"	"	"	"	"	"
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	"
o-moform	ND	5.0	"	"	"	"	"	"	"
omomethane	ND	5.0	"	"	"	"	"	"	"
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
t-Butylbenzene	ND	5.0	"	"	"	"	"	"	"
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	"
Chlorobenzene	ND	5.0	"	"	"	"	"	"	"
Chloroethane	ND	5.0	"	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"	"
Chloromethane	ND	5.0	"	"	"	"	"	"	"
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	"
Chlorotoluene	ND	5.0	"	"	"	"	"	"	"
Bromochloromethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	"
Bromomethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	"
Chlorodifluoromethane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	"
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	"
1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	"

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4-1.5 (0412057-10) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
trans-1,3-Dichloropropene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Phylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Ethylene chloride	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
Propylbenzene	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		117 %		80-120	"	"	"	"	
Surrogate: Toluene-d8		101 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %		74-121	"	"	"	"	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

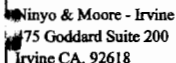
Reported:  
12/14/04 16:14

# Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Sample	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-5-1.5 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Benzene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
Bromobenzene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Chlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	

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Project: **Bloomfield 2**  
Project Number: **205372005**  
Project Manager: **Paul Roberts**

Reported:  
12/14/04 16:14

**Sierra Analytical Labs, Inc.**

Analyte	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	Result	Limit							

21-5-1.5 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Compound	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B
Naphthalene	ND	5.0	"	"	"	"	"	"
Propylbenzene	ND	5.0	"	"	"	"	"	"
Styrene	ND	5.0	"	"	"	"	"	"
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"
Trichloroethene	ND	5.0	"	"	"	"	"	"
Toluene	ND	5.0	"	"	"	"	"	"
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"
1,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"
1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"
Trichloroethene	ND	5.0	"	"	"	"	"	"
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"
Methyl chloride	ND	5.0	"	"	"	"	"	"
m,p-Xylene	ND	5.0	"	"	"	"	"	"
o-Xylene	ND	5.0	"	"	"	"	"	"

Surrogate: Dibromofluoromethane	117 %	80-120	"	"	"	"
Surrogate: Toluene-d8	102 %	81-117	"	"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	74-121	"	"	"	"

N\_-6-1.5 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Chemical	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA §260B
Benzene	ND	5.0	"	"	"	"	"	"
Bromobenzene	ND	5.0	"	"	"	"	"	"
Bromochloromethane	ND	5.0	"	"	"	"	"	"
Bromodichloromethane	ND	5.0	"	"	"	"	"	"
Bromoforn	ND	5.0	"	"	"	"	"	"
Bromomethane	ND	5.0	"	"	"	"	"	"
n-Butylbenzene	ND	5.0	"	"	"	"	"	"
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"
Chlorobenzene	ND	5.0	"	"	"	"	"	"
Chloroethane	ND	5.0	"	"	"	"	"	"
Chloroform	ND	5.0	"	"	"	"	"	"
Chloromethane	ND	5.0	"	"	"	"	"	"
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"
1,1-Dibromochloromethane	ND	5.0	"	"	"	"	"	"

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 475 Goddard Suite 200  
 Irvine CA, 92618

Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

# Volatile Organic Compounds by EPA Method 8260B

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-6-1.5 (0412057-12) Soll Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
2-Dibromo-3-chloropropane	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
1,4-Cyclohexadiene	ND	5.0	"	"	"	"	"	"	
1,2-Cyclohexadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,1,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	

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Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Volatile Organic Compounds by EPA Method 8260B**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PT-6-1.5 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									

m,p-Xylene	ND	5.0	µg/kg	1	B4L0706	12/03/04	12/04/04	EPA 8260B	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %	80-120		"	"	"	"	
Surrogate: Toluene-d8		101 %	81-117		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	74-121		"	"	"	"	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C

Sierra Analytical Labs, Inc.

Sample	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>14-1-2 (0412057-01) Soil</b> <b>Sampled: 12/01/04 00:00</b> <b>Received: 12/02/04 09:10</b>									
Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5		73.0 %	23-120	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		90.1 %	30-115	"	"	"	"	"	
Surrogate: Terphenyl-d14		98.2 %	18-137	"	"	"	"	"	
<b>14-2-2 (0412057-04) Soil</b> <b>Sampled: 12/01/04 00:00</b> <b>Received: 12/02/04 09:10</b>									
Acenaphthene	ND	0.33	mg/kg	1	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	0.33	"	"	"	"	"	"	
Anthracene	ND	0.33	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.33	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.33	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.33	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	0.33	"	"	"	"	"	"	
Chrysene	ND	0.33	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.33	"	"	"	"	"	"	
Dibenzofuran	ND	0.33	"	"	"	"	"	"	
Fluoranthene	ND	0.33	"	"	"	"	"	"	
Fluorene	ND	0.33	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.33	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.33	"	"	"	"	"	"	
Naphthalene	ND	0.33	"	"	"	"	"	"	
Phenanthrene	ND	0.33	"	"	"	"	"	"	
Pyrene	ND	0.33	"	"	"	"	"	"	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PJ-2-2 (0412057-04) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Surrogate: Nitrobenzene-d5		102 %		23-120	B4L0716	12/07/04	12/07/04	EPA 8270C	
Surrogate: 2-Fluorobiphenyl		106 %		30-115	"	"	"	"	
Surrogate: Terphenyl-d14		133 %		18-137	"	"	"	"	
PJ-1-2.5 (0412057-07) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
1-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5		101 %		23-120	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		106 %		30-115	"	"	"	"	
Surrogate: Terphenyl-d14		125 %		18-137	"	"	"	"	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

# Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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11-2-2.5 (0412057-08) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Benzo (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	

Surrogate: Nitrobenzene-d5	85.0 %	23-120	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	71.2 %	30-115	"	"	"	"	"	"	
Surrogate: Terphenyl-d14	90.1 %	18-137	"	"	"	"	"	"	

11-3-2 (0412057-09) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Benzo (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	

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Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>PJ-3-2 (0412057-09) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Surrogate: Nitrobenzene-d5	93.1 %	23-120		B4L0716	12/07/04	12/07/04	EPA 8270C		
Surrogate: 2-Fluorobiphenyl	101 %	30-115		"	"	"	"		
Surrogate: Terphenyl-d14	113 %	18-137		"	"	"	"		
<b>PJ-4-1.5 (0412057-10) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10</b>									
Benaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
1-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	
Surrogate: Nitrobenzene-d5	71.2 %	23-120		"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	111 %	30-115		"	"	"	"	"	
Surrogate: Terphenyl-d14	117 %	18-137		"	"	"	"	"	

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 175 Goddard Suite 200  
 Irvine CA, 92618

Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

# Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C

Sierra Analytical Labs, Inc.

analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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P1-5-15 (0412057-11) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/07/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	

Surrogate: Nitrobenzene-d5	74.2 %	23-120	"	"	"	"	"	"	
Surrogate: 2-Fluorobiphenyl	83.2 %	30-115	"	"	"	"	"	"	
Surrogate: Terphenyl-d14	89.2 %	18-137	"	"	"	"	"	"	

P1-6-15 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10

Acenaphthene	ND	3.3	mg/kg	10	B4L0716	12/07/04	12/08/04	EPA 8270C	
Acenaphthylene	ND	3.3	"	"	"	"	"	"	
Anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3.3	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	3.3	"	"	"	"	"	"	
Chrysene	ND	3.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3.3	"	"	"	"	"	"	
Dibenzofuran	ND	3.3	"	"	"	"	"	"	
Fluoranthene	ND	3.3	"	"	"	"	"	"	
Fluorene	ND	3.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	3.3	"	"	"	"	"	"	
Naphthalene	ND	3.3	"	"	"	"	"	"	
Phenanthrene	ND	3.3	"	"	"	"	"	"	
Pyrene	ND	3.3	"	"	"	"	"	"	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P1-6-15 (0412057-12) Soil Sampled: 12/01/04 00:00 Received: 12/02/04 09:10									
Surrogate: Nitrobenzene-d5		71.2 %		23-120	B4L0716	12/07/04	12/08/04	EPA 8270C	
Surrogate: 2-Fluorobiphenyl		93.1 %		30-115	"	"	"	"	
Surrogate: Terphenyl-d14		103 %		18-137	"	"	"	"	

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 675 Goddard Suite 200  
 Irvine CA, 92618

Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4L0906 - EPA 3050B**

**Blank (B4L0906-BLK1)**

Prepared: 12/09/04 Analyzed: 12/13/04

Antimony	ND	1.6	mg/kg
Arsenic	ND	1.7	"
Barium	ND	3.3	"
Beryllium	ND	0.68	"
Cadmium	ND	0.51	"
Chromium	ND	0.98	"
Cobalt	ND	2.2	"
Copper	ND	2.2	"
Lead	ND	1.3	"
Molybdenum	ND	1.7	"
Nickel	ND	0.79	"
Selenium	ND	1.9	"
Silver	ND	0.80	"
Thallium	ND	1.5	"
Vanadium	ND	0.73	"
Zinc	ND	1.3	"

**ICS (B4L0906-BS1)**

Prepared: 12/09/04 Analyzed: 12/13/04

Antimony	94.2	1.6	mg/kg	100	94.2	75-125
Arsenic	101	1.7	"	100	101	78-122
Barium	102	3.3	"	100	102	80-120
Beryllium	94.9	0.68	"	100	94.9	80-120
Cadmium	98.5	0.51	"	100	98.5	80-120
Chromium	102	0.98	"	100	102	80-120
Cobalt	97.7	2.2	"	100	97.7	80-120
Copper	101	2.2	"	100	101	78-122
Lead	102	1.3	"	100	102	80-120
Molybdenum	103	1.7	"	100	103	80-120
Nickel	99.5	0.79	"	100	99.5	80-120
Selenium	99.3	1.9	"	100	99.3	76-124
Silver	99.0	0.80	"	100	99.0	60-140
Thallium	95.0	1.5	"	100	95.0	80-120
Vanadium	100	0.73	"	100	100	80-120
Zinc	90.2	1.3	"	100	90.2	78-122

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 Irvine CA, 92618

Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4L0906 - EPA 3050B**

**ES Dup (B4L0906-BSD1)**

Prepared: 12/09/04 Analyzed: 12/13/04

Antimony	97.0	1.6	mg/kg	100	97.0	75-125	2.93	20	
Arsenic	100	1.7	"	100	100	78-122	0.995	20	
Barium	103	3.3	"	100	103	80-120	0.976	20	
Beryllium	98.1	0.68	"	100	98.1	80-120	3.32	20	
Cadmium	99.1	0.51	"	100	99.1	80-120	0.607	20	
Chromium	103	0.98	"	100	103	80-120	0.976	20	
Cobalt	101	2.2	"	100	101	80-120	3.32	20	
Copper	106	2.2	"	100	106	78-122	4.83	20	
Lead	100	1.3	"	100	100	80-120	1.98	20	
Molybdenum	101	1.7	"	100	101	80-120	1.96	20	
Nickel	97.7	0.79	"	100	97.7	80-120	1.83	20	
Selenium	97.3	1.9	"	100	97.3	76-124	2.03	20	
Silver	99.7	0.80	"	100	99.7	60-140	0.705	40	
Thallium	90.9	1.5	"	100	90.9	80-120	4.41	20	
Vanadium	101	0.73	"	100	101	80-120	0.995	20	
Zinc	93.6	1.3	"	100	93.6	78-122	3.70	20	

**Matrix Spike (B4L0906-MS1)**

Source: 0412057-01

Prepared: 12/09/04 Analyzed: 12/13/04

Antimony	17.5	1.6	mg/kg	91.5	ND	19.1	60-140		QM-07
Arsenic	107	1.7	"	91.5	6.4	110	70-130		
Barium	318	3.3	"	91.5	220	107	70-130		
Beryllium	87.6	0.68	"	91.5	ND	95.7	70-130		
Cadmium	97.0	0.51	"	91.5	ND	106	70-130		
Chromium	132	0.98	"	91.5	32	109	70-130		
Cobalt	96.4	2.2	"	91.5	14	90.1	70-130		
Copper	117	2.2	"	91.5	26	99.5	70-130		
Lead	110	1.3	"	91.5	14	105	70-130		
Molybdenum	95.4	1.7	"	91.5	1.1	103	70-130		
Nickel	116	0.79	"	91.5	22	103	70-130		
Selenium	97.4	1.9	"	91.5	ND	106	70-130		
Silver	86.5	0.80	"	91.5	ND	94.5	60-140		
Thallium	86.7	1.5	"	91.5	ND	94.8	70-130		
Vanadium	158	0.73	"	91.5	55	113	70-130		
Zinc	139	1.3	"	91.5	55	91.8	70-130		

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Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4L0906 - EPA 3050B</b>										
<b>Matrix Spike Dup (B4L0906-MSD1)</b>										
Source: 0412057-01				Prepared: 12/09/04		Analyzed: 12/13/04				
Antimony	21.4	1.6	mg/kg	94.2	ND	22.7	60-140	20.1	20	QM-07
Arsenic	110	1.7	"	94.2	6.4	110	70-130	2.76	20	
Barium	314	3.3	"	94.2	220	99.8	70-130	1.27	20	
Beryllium	89.1	0.68	"	94.2	ND	94.6	70-130	1.70	20	
Cadmium	101	0.51	"	94.2	ND	107	70-130	4.04	20	
Chromium	137	0.98	"	94.2	32	111	70-130	3.72	20	
Cobalt	98.8	2.2	"	94.2	14	90.0	70-130	2.46	20	
Copper	120	2.2	"	94.2	26	99.8	70-130	2.53	20	
Lead	114	1.3	"	94.2	14	106	70-130	3.57	20	
Molybdenum	98.7	1.7	"	94.2	1.1	104	70-130	3.40	20	
Nickel	120	0.79	"	94.2	22	104	70-130	3.39	20	
Selenium	102	1.9	"	94.2	ND	108	70-130	4.61	20	
Silver	91.6	0.80	"	94.2	ND	97.2	60-140	5.73	40	
Sodium	89.0	1.5	"	94.2	ND	94.5	70-130	2.62	20	
Vanadium	162	0.73	"	94.2	55	114	70-130	2.50	20	
Zinc	141	1.3	"	94.2	55	91.3	70-130	1.43	20	

**Batch B4L0907 - EPA 7471A**

<b>Blank (B4L0907-BLK1)</b>										
Prepared: 12/09/04				Analyzed: 12/10/04						
Mercury	ND	0.18	mg/kg							
<b>LCS (B4L0907-BS1)</b>										
Prepared: 12/09/04				Analyzed: 12/10/04						
Mercury	0.18	0.18	mg/kg	0.167		108	70-130			
<b>Matrix Spike (B4L0907-MS1)</b>										
Source: 0412057-01				Prepared: 12/09/04		Analyzed: 12/10/04				
Mercury	0.21	0.18	mg/kg	0.155	0.04	110	70-130			

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175 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Metals by EPA 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4L0907 - EPA 7471A**

Matrix Spike Dup (B4L0907-MSD1)	Source: 0412057-01		Prepared: 12/09/04		Analyzed: 12/10/04					
Mercury	0.22	0.18	mg/kg	0.153	0.04	118	70-130	4.65	25	

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Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
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**Total Volatile Petroleum Hydrocarbons (TVPH) by GC/FID - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4L0505 - EPA 5035 P &amp; T</b>										
<b>Blank (B4L0505-BLK1)</b>					Prepared & Analyzed: 12/05/04					
Gasoline Range Hydrocarbons (C4-C12)	ND	0.050	mg/kg							
Surrogate: <i>a,a,a-Trifluorotoluene</i>	0.0238		"	0.0200		119	35-130			
<b>BS (B4L0505-BS1)</b>					Prepared & Analyzed: 12/05/04					
Gasoline Range Hydrocarbons (C4-C12)	0.611	0.050	mg/kg	0.600		102	80-120			
<b>Matrix Spike (B4L0505-MS1)</b>					Source: 0412057-12 Prepared & Analyzed: 12/05/04					
Gasoline Range Hydrocarbons (C4-C12)	0.585	0.050	mg/kg	0.600	ND	97.5	50-150			
<b>Matrix Spike Dup (B4L0505-MSD1)</b>					Source: 0412057-12 Prepared & Analyzed: 12/05/04					
Gasoline Range Hydrocarbons (C4-C12)	0.583	0.050	mg/kg	0.600	ND	97.2	50-150	0.342	30	

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Total Petroleum Hydrocarbons Carbon Range Analysis by GC-FID - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4L0908 - EPA 3550B Solid Ext**

**Blank (B4L0908-BLK1)**

Prepared: 12/06/04 Analyzed: 12/09/04

HC < C8	ND	1.0	mg/kg
C8 <= HC < C9	ND	1.0	"
C9 <= HC < C10	ND	1.0	"
C10 <= HC < C11	ND	1.0	"
C11 <= HC < C12	ND	1.0	"
C12 <= HC < C14	ND	1.0	"
C14 <= HC < C16	ND	1.0	"
C16 <= HC < C18	ND	1.0	"
C18 <= HC < C20	ND	1.0	"
C20 <= HC < C24	ND	1.0	"
C24 <= HC < C28	ND	1.0	"
C28 <= HC < C32	ND	1.0	"
C32 <= HC < C36	ND	1.0	"
Total Petroleum Hydrocarbons (C7-C36)	ND	5.0	"

Surrogate: o-Terphenyl 7.50 " 7.50 100 50-150

**CS (B4L0908-BS1)**

Prepared: 12/06/04 Analyzed: 12/09/04

Gasol Range Organics (C10-C24) 97.2 5.0 mg/kg 100 97.2 80-120

**LCS (B4L0908-BS2)**

Prepared: 12/06/04 Analyzed: 12/09/04

Gasol Range Organics (C10-C24) 117 5.0 mg/kg 100 117 80-120

**LCS Dup (B4L0908-BSD1)**

Prepared: 12/06/04 Analyzed: 12/09/04

Gasol Range Organics (C10-C24) 119 5.0 mg/kg 100 119 80-120 20.2 30

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475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4L0706 - EPA 5035 P & T**

**Blank (B4L0706-BLK1)**

Prepared & Analyzed: 12/03/04

Benzene	ND	5.0	µg/kg
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Butylbenzene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
Chlorotoluene	ND	5.0	"
Bromochloromethane	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane (EDB)	ND	5.0	"
Bromomethane	ND	5.0	"
1,1-Dichlorobenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
Chlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,1-Dichloropropane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Ethylbenzene	ND	5.0	"
1,4-Dichlorobutadiene	ND	5.0	"

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Project: Bloomfield 2  
 Project Number: 205372005  
 Project Manager: Paul Roberts

Reported:  
 12/14/04 16:14

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Sierra Analytical Labs, Inc.**

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Notes
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**Batch B4L0706 - EPA 5035 P & T**

<b>Blank (B4L0706-BLK1)</b>		Prepared & Analyzed: 12/03/04								
Isopropylbenzene	ND	5.0	µg/kg							
p-Isopropyltoluene	ND	5.0	"							
Ethylene chloride	ND	5.0	"							
Ethyl tert-butyl ether	ND	5.0	"							
Naphthalene	ND	5.0	"							
Propylbenzene	ND	5.0	"							
rene	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
trichloroethene	ND	5.0	"							
luene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
4-Trichlorobenzene	ND	5.0	"							
1-Trichloroethane	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
chlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
5-Trimethylbenzene	ND	5.0	"							
ethyl chloride	ND	5.0	"							
m,p-Xylene	ND	5.0	"							
o-Xylene	ND	5.0	"							

Surrogate: Dibromofluoromethane	50.2		"	50.0		100	80-120
Surrogate: Toluene-d8	49.4		"	50.0		98.8	81-117
Surrogate: 4-Bromofluorobenzene	49.1		"	50.0		98.2	74-121

ICS (B4L0706-BS1)			Prepared & Analyzed: 12/03/04			
Benzene	52.4	5.0	µg/kg	50.0	105	80-120
Chlorobenzene	54.4	5.0	"	50.0	109	80-120
1,2-Dichloroethene	42.7	5.0	"	50.0	85.4	80-120
Toluene	50.9	5.0	"	50.0	102	80-120
Trichloroethene	53.1	5.0	"	50.0	106	80-120

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
75 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	--------------	-------

**Batch B4L0706 - EPA 5035 P & T**

Matrix Spike (B4L0706-MS1)		Source: 0412057-12		Prepared: 12/03/04		Analyzed: 12/04/04	
Benzene	69.0	5.0	µg/kg	50.0	ND	138	37-151
Chlorobenzene	61.9	5.0	"	50.0	ND	124	37-160
1,2-Dichloroethene	53.0	5.0	"	50.0	ND	106	50-150
1,4-Dichloroethene	61.2	5.0	"	50.0	ND	122	47-150
Trichloroethene	63.1	5.0	"	50.0	ND	126	71-157

Matrix Spike Dup (B4L0706-MSD1)		Source: 0412057-12		Prepared: 12/03/04		Analyzed: 12/04/04	
Benzene	59.4	5.0	µg/kg	50.0	ND	119	37-151 15.0 30
Chlorobenzene	54.4	5.0	"	50.0	ND	109	37-160 12.9 30
1,2-Dichloroethene	44.6	5.0	"	50.0	ND	89.2	50-150 17.2 30
1,4-Dichloroethene	53.3	5.0	"	50.0	ND	107	47-150 13.8 30
Trichloroethene	53.3	5.0	"	50.0	ND	107	71-157 16.8 30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
75 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B4L0716 - EPA 3550B Solid Ext**

**Blank (B4L0716-BLK1)**

Prepared & Analyzed: 12/07/04

Acenaphthene	ND	0.33	mg/kg							
Acenaphthylene	ND	0.33	"							
Anthracene	ND	0.33	"							
Benzo (a) anthracene	ND	0.33	"							
Benzo (b) fluoranthene	ND	0.33	"							
Benzo (k) fluoranthene	ND	0.33	"							
Benzo (a) pyrene	ND	0.33	"							
Benzo (g,h,i) perylene	ND	0.33	"							
Chrysene	ND	0.33	"							
Dibenz (a,h) anthracene	ND	0.33	"							
Dibenzofuran	ND	0.33	"							
Fluoranthene	ND	0.33	"							
Indene	ND	0.33	"							
Indeno (1,2,3-cd) pyrene	ND	0.33	"							
2-Methylnaphthalene	ND	0.33	"							
Naphthalene	ND	0.33	"							
Phenanthrene	ND	0.33	"							
Pyrene	ND	0.33	"							
Surrogate: Nitrobenzene-d5	0.344		"	0.333		103	23-120			
Surrogate: 2-Fluorobiphenyl	0.333		"	0.333		100	30-115			
Surrogate: Terphenyl-d14	0.340		"	0.333		102	18-137			

**LCS (B4L0716-BS1)**

Prepared & Analyzed: 12/07/04

Acenaphthene	0.220	0.33	mg/kg	0.333		66.1	47-145			
Pyrene	0.218	0.33	"	0.333		65.5	52-115			

**LCS (B4L0716-BS2)**

Prepared: 12/07/04 Analyzed: 12/08/04

Acenaphthene	0.202	0.33	mg/kg	0.333		60.7	47-145			
Pyrene	0.227	0.33	"	0.333		68.2	52-115			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

**Polynuclear Aromatic Hydrocarbons (GC/MS) by EPA 8270C - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch B4L0716 - EPA 3550B Solid Ext**

**CS Dup (B4L0716-BSD1)**

Prepared & Analyzed: 12/07/04

Acenaphthene	0.202	0.33	mg/kg	0.333	60.7	47-145	8.53	30	
Pyrene	0.227	0.33	"	0.333	68.2	52-115	4.04	30	

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: **Bloomfield 2**  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
12/14/04 16:14

#### Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

S-03 Surrogate diluted out.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



# CHAIN OF CUSTODY RECORD

FOR LABORATORY USE ONLY:



**Advanced Technology  
Laboratories**

3275 Walnut Avenue  
Signal Hill, CA 90755  
(562) 989-4045 • Fax (562) 989-4040

P.O.#:

Logged By:

Date:

Method of Transport

Client ☐

ATL ☐

CA OverN ☐

FEDEX ☐

Other:

Sample Condition Upon Receipt

1. CHILLED ☒ N ☐ 4. SEALED ☒ N ☐

2. HEADSPACE (VOA) ☐ N ☒ 5. # OF SPLS MATCH COC ☒ N ☐

3. CONTAINER INTACT ☒ N ☐ 6. PRESERVED ☒ N ☐

Client:

Attn: **Ninjo & Moore**

Address:

City:

State:

Zip Code:

TEL: ( )

FAX: ( )

Project Name:

**Bloomfield II**

Project #:

**205372005**

Sampler:

(Printed Name)

**Paul Roberts**

(Signature)

**Paul Roberts**

Relinquished by: (Signature and Printed Name)

**Paul Roberts**

Date:

**12/2/04**

Time:

**9:10**

Received by: (Signature and Printed Name)

**Paul Roberts**

**CHAS FORSYTH**

Date:

**12/2**

Time:

**9:10**

Relinquished by: (Signature and Printed Name)

**Paul Roberts**

Date:

**12/2**

Time:

**9:50**

Received by: (Signature and Printed Name)

**Paul Roberts**

**CHAS FORSYTH**

Date:

**12/2/04**

Time:

**9:50**

I hereby authorize ATL to perform the work indicated below:

Project Mgr./Submitter:

**Paul Roberts**

(Print Name)

**12-1-04**

Date

Signature

Send Report To:

Attn:

Co:

Address

City:

State:

Zip:

Bill To:

Attn:

Co:

Address

City:

State:

Zip:

Special Instructions/Comments:

**4.0 RSA-B31**

## Sample/Records - Archival & Disposal

Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

## Storage Fees (applies when storage is requested):

- Sample : \$2.00 / sample / mo (after 45 days)
- Records : \$1.00 / ATL workorder / mo (after 1 year)

## LAB USE ONLY:

Batch #:	Sample Description	Date	Time
Lab No.	Sample I.D. / Location		
01	T4-1-2	12/1	
02	T4-1-5		
03	T4-1-10		
04	T4-2-2		
05	T4-2-5		
06	T4-2-10		
07	P1-1-2.5		
08	P1-2-2.5		
09	P1-3-2		
10	P1-4-1.5		

Circle or Add Analysis(es) Requested

Requested

Requested

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## QA/QC

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CT ☐

SWRCB ☐

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TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight

≤ 24 hr

B=

Emergency

Next workday

C=

Critical

2 Workdays

D=

Urgent

3 Workdays

E=

Routine

7 Workdays

Preservatives:

H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C

Z=Zn(Ac)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

Container Types: T=Tube V=VOA L=Liter P=Pin J=Jar B=Tedlar G=Glass P=Plastic M=Metal

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.



# Advanced Technology Laboratories

3275 Walnut Avenue  
Signal Hill, CA 90755  
(562) 989-4045 • Fax (562) 989-4040

## CHAIN OF CUSTODY RECORD

### FOR LABORATORY USE ONLY:

Client: \_\_\_\_\_ Address: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ TEL: ( ) \_\_\_\_\_  
City: \_\_\_\_\_ FAX: ( ) \_\_\_\_\_

Project Name: Bloomfield # Project #: 205372005 Sampler: \_\_\_\_\_ (Printed Name) \_\_\_\_\_ (Signature)  
Date: 12-2-04 Time: 9:10 Received by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: 12/2 Time: 9:10

Relinquished by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: 12/2 Time: 9:10 Received by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ (Signature and Printed Name) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

I hereby authorize ATL to perform the work indicated below:

Project Mgr./Submitter: \_\_\_\_\_

Print Name \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Send Report To: \_\_\_\_\_

Attn: \_\_\_\_\_

Co: \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Bill To: \_\_\_\_\_

Attn: \_\_\_\_\_

Co: \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Special Instructions/Comments:

Circle or Add Analysis(es) Requested

Specify Appropriate Matrix

Container(s)

TAT # Type

REMARKS

LAB USE ONLY: Batch #: \_\_\_\_\_

Sample Description

Lab No. Sample I.D. / Location Date Time

11 P1-5-1.5 12/1

12 P1-6-1.5

TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays Preservatives: H=HCl N=HNO<sub>3</sub> S=H<sub>2</sub>SO<sub>4</sub> C=4°C Z=Zn(AC)<sub>2</sub> O=NaOH T=Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub>

DISTRIBUTION: White with report, Yellow to folder, Pink to submitter.



06 January 2005

Paul Roberts  
Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine, CA 92618

RE: Bloomfield 2

Work Order No.: 0412057

Attached are the results of the analyses for samples received by the laboratory on 12/02/04 09:10.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.  
If you require any additional retaining time, please advise us.

Sincerely,

---

Richard K. Forsyth  
Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS),  
Environmental Laboratory Accreditation Program (ELAP) No. 2320.



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P1-1-2.5	0412057-07	Soil	12/01/04 00:00	12/02/04 09:10
P1-2-2.5	0412057-08	Soil	12/01/04 00:00	12/02/04 09:10
P1-3-2	0412057-09	Soil	12/01/04 00:00	12/02/04 09:10
P1-4-1.5	0412057-10	Soil	12/01/04 00:00	12/02/04 09:10
P1-5-1.5	0412057-11	Soil	12/01/04 00:00	12/02/04 09:10
P1-6-1.5	0412057-12	Soil	12/01/04 00:00	12/02/04 09:10

#### CASE NARRATIVE

**SAMPLE RECEIPT:** Samples were received intact, at 4 °C, and accompanied by chain of custody documentation.  
**PRESERVATION:** Samples requiring preservation were verified prior to sample preparation and analysis.  
**HOLDING TIMES:** All holding times were met, unless otherwise noted in the report with data qualifiers.  
**QA/QC CRITERIA:** All quality objective criteria were met, except as noted in the report with data qualifiers.

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

**TCLP Metals by 6000/7000 Series Methods**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
P1-1-2.5 (0412057-07) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	ND	0.13	mg/L	2	B5A0304	01/03/05	01/03/05	EPA 6010B		
P1-5-1.5 (0412057-11) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	ND	0.13	mg/L	2	B5A0304	01/03/05	01/03/05	EPA 6010B		
P1-6-1.5 (0412057-12) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	ND	0.13	mg/L	2	B5A0304	01/03/05	01/03/05	EPA 6010B		

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

**STLC Metals by EPA 6000/7000 Series Methods**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
P1-1-2.5 (0412057-07) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Copper	56.2	0.42	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		
Lead	4.82	0.32	"	"	"	"	"	"		
P1-2-2.5 (0412057-08) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	1.93	0.32	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		
P1-3-2 (0412057-09) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	0.72	0.32	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		
P1-4-1.5 (0412057-10) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	1.60	0.32	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		
P1-5-1.5 (0412057-11) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	6.66	0.32	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		
P1-6-1.5 (0412057-12) Soil    Sampled: 12/01/04 00:00    Received: 12/02/04 09:10										
Lead	3.08	0.32	mg/L	2	B5A0303	01/03/05	01/03/05	EPA 6010B		

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

**TCLP Metals by 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B5A0304 - EPA 3010A**

**Blank (B5A0304-BLK1)**

Prepared & Analyzed: 01/03/05

Lead	ND	0.13	mg/L							
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**LCS (B5A0304-BS1)**

Prepared & Analyzed: 01/03/05

Lead	0.19	0.13	mg/L	0.200		95.0	80-120			
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**Duplicate (B5A0304-DUP1)**

Source: 0412057-07

Prepared & Analyzed: 01/03/05

Lead	ND	0.13	mg/L		ND				20	
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**Matrix Spike (B5A0304-MS1)**

Source: 0412057-07

Prepared & Analyzed: 01/03/05

Lead	0.19	0.13	mg/L	0.200	ND	95.0	80-120			
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**Matrix Spike Dup (B5A0304-MSD1)**

Source: 0412057-07

Prepared & Analyzed: 01/03/05

Lead	0.20	0.13	mg/L	0.200	ND	100	80-120	5.13	20	
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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

**STLC Metals by EPA 6000/7000 Series Methods - Quality Control**

**Sierra Analytical Labs, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B5A0303 - EPA 3010A</b>									
<b>Blank (B5A0303-BLK1)</b>									
					Prepared & Analyzed: 01/03/05				
Copper	ND	0.42	mg/L						
Lead	ND	0.32	"						
<b>LCS (B5A0303-BS1)</b>									
					Prepared & Analyzed: 01/03/05				
Copper	1.75	0.42	mg/L	2.00	87.5	70-130			
Lead	1.75	0.32	"	2.00	87.5	80-120			
<b>Duplicate (B5A0303-DUP1)</b>									
					Source: 0412057-07 Prepared & Analyzed: 01/03/05				
Copper	82.4	0.42	mg/L		56.2		37.8	20	QR-04
Lead	5.97	0.32	"		4.82		21.3	20	QR-02
<b>Matrix Spike (B5A0303-MS1)</b>									
					Source: 0412057-07 Prepared & Analyzed: 01/03/05				
Copper	53.3	0.42	mg/L	2.00	56.2	NR	75-125		QM-07
Lead	6.74	0.32	"	2.00	4.82	96.0	80-120		
<b>Matrix Spike Dup (B5A0303-MSD1)</b>									
					Source: 0412057-07 Prepared & Analyzed: 01/03/05				
Copper	58.5	0.42	mg/L	2.00	56.2	115	75-125	9.30	20
Lead	6.70	0.32	"	2.00	4.82	94.0	80-120	0.595	20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





Ninyo & Moore - Irvine  
475 Goddard Suite 200  
Irvine CA, 92618

Project: Bloomfield 2  
Project Number: 205372005  
Project Manager: Paul Roberts

Reported:  
01/06/05 17:05

#### Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

QR-04 The RPD result exceeded the QC control limits; however, either the MS or MSD percent recovery was acceptable. Sample results for the QC batch were accepted based on percent recovery and completeness of QC data.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

January 28, 2005



Paul Roberts  
Ninyo & Moore  
475 Goddard Suite 200  
Irvine, CA 92618

ELAP No.: 1838  
NELAP No.: 02107CA  
CSDLAC No.: 10196

TEL: (949) 697-2198  
FAX: (949) 753-7071

Workorder No.: 073856

RE: Bloomfield II, 205372005

Attention: Paul Roberts

Enclosed are the results for sample(s) received on January 27, 2005 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie F. Rodriguez".

Eddie F. Rodriguez  
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Project: Bloomfield II, 205372005  
Lab Order: 073856

## CASE NARRATIVE

All volatile soil analyses were performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

### Analytical Comments for EPA 8270

The following samples were diluted due to sample matrix:

073856-001G  
073856-002G  
073856-003G  
073856-005G  
073856-006G

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-001

Client Sample ID: T5-1-9  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP5_050128A	QC Batch: 21082	PrepDate: 1/27/2005	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	1/28/2005
Arsenic	ND	1.0	mg/Kg	1	1/28/2005
Barium	170	1.0	mg/Kg	1	1/28/2005
Beryllium	ND	1.0	mg/Kg	1	1/28/2005
Cadmium	ND	1.0	mg/Kg	1	1/28/2005
Chromium	23	1.0	mg/Kg	1	1/28/2005
Cobalt	12	1.0	mg/Kg	1	1/28/2005
Copper	30	1.0	mg/Kg	1	1/28/2005
Lead	5.8	1.0	mg/Kg	1	1/28/2005
Molybdenum	1.6	1.0	mg/Kg	1	1/28/2005
Nickel	19	1.0	mg/Kg	1	1/28/2005
Selenium	ND	1.0	mg/Kg	1	1/28/2005
Silver	ND	1.0	mg/Kg	1	1/28/2005
Thallium	ND	1.0	mg/Kg	1	1/28/2005
Vanadium	38	1.0	mg/Kg	1	1/28/2005
Zinc	53	1.0	mg/Kg	1	1/28/2005

## HYDROCARBON CHAIN IDENTIFICATION (LUFT)

EPA 8015B

RunID: GC8_050127A	QC Batch: 21081	PrepDate: 1/27/2005	Analyst: CBR		
T/R Hydrocarbons: >C32	1000	50	mg/Kg	5	1/28/2005
T/R Hydrocarbons: C10-C12	1200	50	mg/Kg	5	1/28/2005
T/R Hydrocarbons: C13-C15	2200	50	mg/Kg	5	1/28/2005
T/R Hydrocarbons: C16-C22	3800	50	mg/Kg	5	1/28/2005
T/R Hydrocarbons: C23-C32	3300	50	mg/Kg	5	1/28/2005

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_050128A	QC Batch: E05VS026	PrepDate: 1/27/2005	Analyst: JV		
GRO	440	54	mg/Kg	50	1/28/2005

## MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)

EPA 7471A

RunID: AA1_050128A	QC Batch: 21084	PrepDate: 1/27/2005	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-001

**Client Sample ID:** T5-1-9  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS****EPA 8260B**

RunID:	MS3_050127A	QC Batch:	R05VS020	PrepDate:	1/27/2005	Analyst: JPC
1,1,1,2-Tetrachloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,1,1-Trichloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,1,2,2-Tetrachloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,1,2-Trichloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,1-Dichloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,1-Dichloroethene	ND	5.8	µg/Kg	1	1/27/2005	
1,1-Dichloropropene	ND	5.8	µg/Kg	1	1/27/2005	
1,2,3-Trichlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,2,3-Trichloropropane	ND	5.8	µg/Kg	1	1/27/2005	
1,2,4-Trichlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,2,4-Trimethylbenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,2-Dibromo-3-chloropropane	ND	12	µg/Kg	1	1/27/2005	
1,2-Dibromoethane	ND	5.8	µg/Kg	1	1/27/2005	
1,2-Dichlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,2-Dichloroethane	ND	5.8	µg/Kg	1	1/27/2005	
1,2-Dichloropropane	ND	5.8	µg/Kg	1	1/27/2005	
1,3,5-Trimethylbenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,3-Dichlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
1,3-Dichloropropane	ND	5.8	µg/Kg	1	1/27/2005	
1,4-Dichlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
2,2-Dichloropropane	ND	5.8	µg/Kg	1	1/27/2005	
2-Chlorotoluene	ND	5.8	µg/Kg	1	1/27/2005	
4-Chlorotoluene	ND	5.8	µg/Kg	1	1/27/2005	
4-Isopropyltoluene	ND	5.8	µg/Kg	1	1/27/2005	
Benzene	ND	5.8	µg/Kg	1	1/27/2005	
Bromobenzene	ND	5.8	µg/Kg	1	1/27/2005	
Bromodichloromethane	ND	5.8	µg/Kg	1	1/27/2005	
Bromoform	ND	5.8	µg/Kg	1	1/27/2005	
Bromomethane	ND	5.8	µg/Kg	1	1/27/2005	
Carbon tetrachloride	ND	5.8	µg/Kg	1	1/27/2005	
Chlorobenzene	ND	5.8	µg/Kg	1	1/27/2005	
Chloroethane	ND	5.8	µg/Kg	1	1/27/2005	
Chloroform	ND	5.8	µg/Kg	1	1/27/2005	
Chloromethane	ND	5.8	µg/Kg	1	1/27/2005	
cis-1,2-Dichloroethene	ND	5.8	µg/Kg	1	1/27/2005	
cis-1,3-Dichloropropene	ND	5.8	µg/Kg	1	1/27/2005	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-001

Client Sample ID: T5-1-9  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
Dibromochloromethane	ND	5.8	µg/Kg	1	1/27/2005
Dibromomethane	ND	5.8	µg/Kg	1	1/27/2005
Dichlorodifluoromethane	ND	5.8	µg/Kg	1	1/27/2005
Ethylbenzene	27	5.8	µg/Kg	1	1/27/2005
Hexachlorobutadiene	ND	5.8	µg/Kg	1	1/27/2005
Isopropylbenzene	140	5.8	µg/Kg	1	1/27/2005
m,p-Xylene	ND	5.8	µg/Kg	1	1/27/2005
Methylene chloride	ND	5.8	µg/Kg	1	1/27/2005
n-Butylbenzene	38	5.8	µg/Kg	1	1/27/2005
n-Propylbenzene	230	5.8	µg/Kg	1	1/27/2005
Naphthalene	16000	580	µg/Kg	100	1/28/2005
o-Xylene	ND	5.8	µg/Kg	1	1/27/2005
sec-Butylbenzene	110	5.8	µg/Kg	1	1/27/2005
Styrene	ND	5.8	µg/Kg	1	1/27/2005
tert-Butylbenzene	ND	5.8	µg/Kg	1	1/27/2005
Tetrachloroethene	ND	5.8	µg/Kg	1	1/27/2005
Toluene	ND	5.8	µg/Kg	1	1/27/2005
trans-1,2-Dichloroethene	ND	5.8	µg/Kg	1	1/27/2005
Trichloroethene	ND	5.8	µg/Kg	1	1/27/2005
Trichlorofluoromethane	ND	5.8	µg/Kg	1	1/27/2005
Vinyl chloride	ND	5.8	µg/Kg	1	1/27/2005

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

### EPA 8270C

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
2-Methylnaphthalene	53000	16000	µg/Kg	50	1/28/2005
Acenaphthene	ND	16000	µg/Kg	50	1/28/2005
Acenaphthylene	ND	16000	µg/Kg	50	1/28/2005
Anthracene	ND	16000	µg/Kg	50	1/28/2005
Benzo(a)anthracene	ND	16000	µg/Kg	50	1/28/2005
Benzo(a)pyrene	ND	16000	µg/Kg	50	1/28/2005
Benzo(b)fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Benzo(g,h,i)perylene	ND	16000	µg/Kg	50	1/28/2005
Benzo(k)fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Chrysene	ND	16000	µg/Kg	50	1/28/2005
Dibenz(a,h)anthracene	ND	16000	µg/Kg	50	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-001

Client Sample ID: T5-1-9  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Fluorene	ND	16000	µg/Kg	50	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	16000	µg/Kg	50	1/28/2005
Naphthalene	17000	16000	µg/Kg	50	1/28/2005
Phenanthrene	ND	16000	µg/Kg	50	1/28/2005
Pyrene	ND	16000	µg/Kg	50	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-002

**Client Sample ID:** T5-2-9  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

(EPA 3050B)

**EPA 6010B**

RunID: ICP5_050128A	QC Batch: 21082				PrepDate: 1/27/2005	Analyst: RQ
Antimony	ND	1.0		mg/Kg	1	1/28/2005
Arsenic	ND	1.0		mg/Kg	1	1/28/2005
Barium	120	1.0		mg/Kg	1	1/28/2005
Beryllium	ND	1.0		mg/Kg	1	1/28/2005
Cadmium	ND	1.0		mg/Kg	1	1/28/2005
Chromium	18	1.0		mg/Kg	1	1/28/2005
Cobalt	10	1.0		mg/Kg	1	1/28/2005
Copper	22	1.0		mg/Kg	1	1/28/2005
Lead	5.9	1.0		mg/Kg	1	1/28/2005
Molybdenum	1.3	1.0		mg/Kg	1	1/28/2005
Nickel	16	1.0		mg/Kg	1	1/28/2005
Selenium	ND	1.0		mg/Kg	1	1/28/2005
Silver	ND	1.0		mg/Kg	1	1/28/2005
Thallium	ND	1.0		mg/Kg	1	1/28/2005
Vanadium	30	1.0		mg/Kg	1	1/28/2005
Zinc	46	1.0		mg/Kg	1	1/28/2005

**HYDROCARBON CHAIN IDENTIFICATION**

(LUFT)

**EPA 8015B**

RunID: GC8_050127A	QC Batch: 21081				PrepDate: 1/27/2005	Analyst: CBR
T/R Hydrocarbons: >C32	1500	50		mg/Kg	5	1/28/2005
T/R Hydrocarbons: C10-C12	1700	50		mg/Kg	5	1/28/2005
T/R Hydrocarbons: C13-C15	2800	50		mg/Kg	5	1/28/2005
T/R Hydrocarbons: C16-C22	4900	50		mg/Kg	5	1/28/2005
T/R Hydrocarbons: C23-C32	4600	50		mg/Kg	5	1/28/2005

**GASOLINE RANGE ORGANICS BY GC/FID****EPA 8015B(M)**

RunID: GC2_050128A	QC Batch: E05VS026				PrepDate: 1/27/2005	Analyst: JV
GRO	4.5	1.2		mg/Kg	1	1/28/2005

**MERCURY BY COLD VAPOR TECHNIQUE**

(EPA 7471)

**EPA 7471A**

RunID: AA1_050128A	QC Batch: 21084				PrepDate: 1/27/2005	Analyst: JT
Mercury	ND	0.10		mg/Kg	1	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantization limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-002

Client Sample ID: TS-2-9  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

## EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,1,1-Trichloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,1,2,2-Tetrachloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,1,2-Trichloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,1-Dichloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,1-Dichloroethene	ND	5.2	µg/Kg	1	1/27/2005
1,1-Dichloropropene	ND	5.2	µg/Kg	1	1/27/2005
1,2,3-Trichlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
1,2,3-Trichloropropane	ND	5.2	µg/Kg	1	1/27/2005
1,2,4-Trichlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
1,2,4-Trimethylbenzene	170	5.2	µg/Kg	1	1/27/2005
1,2-Dibromo-3-chloropropane	ND	10	µg/Kg	1	1/27/2005
1,2-Dibromoethane	ND	5.2	µg/Kg	1	1/27/2005
1,2-Dichlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
1,2-Dichloroethane	ND	5.2	µg/Kg	1	1/27/2005
1,2-Dichloropropane	ND	5.2	µg/Kg	1	1/27/2005
1,3,5-Trimethylbenzene	ND	5.2	µg/Kg	1	1/27/2005
1,3-Dichlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
1,3-Dichloropropane	ND	5.2	µg/Kg	1	1/27/2005
1,4-Dichlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
2,2-Dichloropropane	ND	5.2	µg/Kg	1	1/27/2005
2-Chlorotoluene	ND	5.2	µg/Kg	1	1/27/2005
4-Chlorotoluene	ND	5.2	µg/Kg	1	1/27/2005
4-Isopropyltoluene	45	5.2	µg/Kg	1	1/27/2005
Benzene	ND	5.2	µg/Kg	1	1/27/2005
Bromobenzene	ND	5.2	µg/Kg	1	1/27/2005
Bromodichloromethane	ND	5.2	µg/Kg	1	1/27/2005
Bromoform	ND	5.2	µg/Kg	1	1/27/2005
Bromomethane	ND	5.2	µg/Kg	1	1/27/2005
Carbon tetrachloride	ND	5.2	µg/Kg	1	1/27/2005
Chlorobenzene	ND	5.2	µg/Kg	1	1/27/2005
Chloroethane	ND	5.2	µg/Kg	1	1/27/2005
Chloroform	ND	5.2	µg/Kg	1	1/27/2005
Chloromethane	ND	5.2	µg/Kg	1	1/27/2005
cis-1,2-Dichloroethene	ND	5.2	µg/Kg	1	1/27/2005
cis-1,3-Dichloropropene	ND	5.2	µg/Kg	1	1/27/2005

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-002

Client Sample ID: T5-2-9  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
Dibromochloromethane	ND	5.2	µg/Kg	1	1/27/2005
Dibromomethane	ND	5.2	µg/Kg	1	1/27/2005
Dichlorodifluoromethane	ND	5.2	µg/Kg	1	1/27/2005
Ethylbenzene	110	5.2	µg/Kg	1	1/27/2005
Hexachlorobutadiene	ND	5.2	µg/Kg	1	1/27/2005
Isopropylbenzene	260	5.2	µg/Kg	1	1/27/2005
m,p-Xylene	ND	5.2	µg/Kg	1	1/27/2005
Methylene chloride	ND	5.2	µg/Kg	1	1/27/2005
n-Butylbenzene	58	5.2	µg/Kg	1	1/27/2005
n-Propylbenzene	7200	2600	µg/Kg	500	1/28/2005
Naphthalene	28000	2800	µg/Kg	500	1/28/2005
o-Xylene	ND	5.2	µg/Kg	1	1/27/2005
sec-Butylbenzene	180	5.2	µg/Kg	1	1/27/2005
Styrene	ND	5.2	µg/Kg	1	1/27/2005
tert-Butylbenzene	ND	5.2	µg/Kg	1	1/27/2005
Tetrachloroethene	ND	5.2	µg/Kg	1	1/27/2005
Toluene	ND	5.2	µg/Kg	1	1/27/2005
trans-1,2-Dichloroethene	ND	5.2	µg/Kg	1	1/27/2005
Trichloroethene	ND	5.2	µg/Kg	1	1/27/2005
Trichlorofluoromethane	ND	5.2	µg/Kg	1	1/27/2005
Vinyl chloride	ND	5.2	µg/Kg	1	1/27/2005

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

### EPA 8270C

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
2-Methylnaphthalene	60000	16000	µg/Kg	50	1/28/2005
Acenaphthene	ND	16000	µg/Kg	50	1/28/2005
Acenaphthylene	ND	16000	µg/Kg	50	1/28/2005
Anthracene	ND	16000	µg/Kg	50	1/28/2005
Benzo(a)anthracene	ND	16000	µg/Kg	50	1/28/2005
Benzo(a)pyrene	ND	16000	µg/Kg	50	1/28/2005
Benzo(b)fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Benzo(g,h,i)perylene	ND	16000	µg/Kg	50	1/28/2005
Benzo(k)fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Chrysene	ND	16000	µg/Kg	50	1/28/2005
Dibenz(a,h)anthracene	ND	16000	µg/Kg	50	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-002

**Client Sample ID:** T5-2-9  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
**(EPA 3550B)**

**EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	16000	µg/Kg	50	1/28/2005
Fluorene	ND	16000	µg/Kg	50	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	16000	µg/Kg	50	1/28/2005
Naphthalene	22000	16000	µg/Kg	50	1/28/2005
Phenanthrene	ND	16000	µg/Kg	50	1/28/2005
Pyrene	ND	16000	µg/Kg	50	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-003

**Client Sample ID:** T6-1-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP5_050128A	QC Batch: 21082	PrepDate: 1/27/2005	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	1/28/2005
Arsenic	ND	1.0	mg/Kg	1	1/28/2005
Barium	170	1.0	mg/Kg	1	1/28/2005
Beryllium	ND	1.0	mg/Kg	1	1/28/2005
Cadmium	ND	1.0	mg/Kg	1	1/28/2005
Chromium	18	1.0	mg/Kg	1	1/28/2005
Cobalt	9.6	1.0	mg/Kg	1	1/28/2005
Copper	19	1.0	mg/Kg	1	1/28/2005
Lead	14	1.0	mg/Kg	1	1/28/2005
Molybdenum	ND	1.0	mg/Kg	1	1/28/2005
Nickel	14	1.0	mg/Kg	1	1/28/2005
Selenium	ND	1.0	mg/Kg	1	1/28/2005
Silver	ND	1.0	mg/Kg	1	1/28/2005
Thallium	ND	1.0	mg/Kg	1	1/28/2005
Vanadium	31	1.0	mg/Kg	1	1/28/2005
Zinc	37	1.0	mg/Kg	1	1/28/2005

## HYDROCARBON CHAIN IDENTIFICATION (LUFT)

EPA 8015B

RunID: GC8_050127A	QC Batch: 21081	PrepDate: 1/27/2005	Analyst: CBR		
T/R Hydrocarbons: >C32	140	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C16-C22	83	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C23-C32	300	10	mg/Kg	1	1/28/2005

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_050127A	QC Batch: E05VS025	PrepDate: 1/27/2005	Analyst: JV		
GRO	ND	1.2	mg/Kg	1	1/27/2005

## MERCURY BY COLD VAPOR TECHNIQUE (EPA 7471)

EPA 7471A

RunID: AA1_050128A	QC Batch: 21084	PrepDate: 1/27/2005	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 E - Value above quantitation range  
 H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-003

**Client Sample ID:** T6-1-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

## EPA 8260B

RunID:	MS3_050128A	QC Batch:	R05VS021	PrepDate:	1/27/2005	Analyst:	JPC
1,1,1,2-Tetrachloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,1,1-Trichloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,1,2,2-Tetrachloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,1,2-Trichloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,1-Dichloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,1-Dichloroethene	ND	5.7	µg/Kg	1	1/28/2005		
1,1-Dichloropropene	ND	5.7	µg/Kg	1	1/28/2005		
1,2,3-Trichlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,2,3-Trichloropropane	ND	5.7	µg/Kg	1	1/28/2005		
1,2,4-Trichlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,2,4-Trimethylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	1/28/2005		
1,2-Dibromoethane	ND	5.7	µg/Kg	1	1/28/2005		
1,2-Dichlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,2-Dichloroethane	ND	5.7	µg/Kg	1	1/28/2005		
1,2-Dichloropropane	ND	5.7	µg/Kg	1	1/28/2005		
1,3,5-Trimethylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,3-Dichlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
1,3-Dichloropropane	ND	5.7	µg/Kg	1	1/28/2005		
1,4-Dichlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
2,2-Dichloropropane	ND	5.7	µg/Kg	1	1/28/2005		
2-Chlorotoluene	ND	5.7	µg/Kg	1	1/28/2005		
4-Chlorotoluene	ND	5.7	µg/Kg	1	1/28/2005		
4-Isopropyltoluene	ND	5.7	µg/Kg	1	1/28/2005		
Benzene	ND	5.7	µg/Kg	1	1/28/2005		
Bromobenzene	ND	5.7	µg/Kg	1	1/28/2005		
Bromodichloromethane	ND	5.7	µg/Kg	1	1/28/2005		
Bromoform	ND	5.7	µg/Kg	1	1/28/2005		
Bromomethane	ND	5.7	µg/Kg	1	1/28/2005		
Carbon tetrachloride	ND	5.7	µg/Kg	1	1/28/2005		
Chlorobenzene	ND	5.7	µg/Kg	1	1/28/2005		
Chloroethane	ND	5.7	µg/Kg	1	1/28/2005		
Chloroform	ND	5.7	µg/Kg	1	1/28/2005		
Chloromethane	ND	5.7	µg/Kg	1	1/28/2005		
cis-1,2-Dichloroethene	ND	5.7	µg/Kg	1	1/28/2005		
cis-1,3-Dichloropropene	ND	5.7	µg/Kg	1	1/28/2005		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-003

**Client Sample ID:** T6-1-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID:	MS3_050128A	QC Batch:	R05VS021	PrepDate:	1/27/2005	Analyst:	JPC
Dibromochloromethane	ND	5.7	µg/Kg	1	1/28/2005		
Dibromomethane	ND	5.7	µg/Kg	1	1/28/2005		
Dichlorodifluoromethane	ND	5.7	µg/Kg	1	1/28/2005		
Ethylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
Hexachlorobutadiene	ND	5.7	µg/Kg	1	1/28/2005		
Isopropylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
m,p-Xylene	ND	5.7	µg/Kg	1	1/28/2005		
Methylene chloride	ND	5.7	µg/Kg	1	1/28/2005		
n-Butylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
n-Propylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
Naphthalene	ND	5.7	µg/Kg	1	1/28/2005		
o-Xylene	ND	5.7	µg/Kg	1	1/28/2005		
sec-Butylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
Styrene	ND	5.7	µg/Kg	1	1/28/2005		
tert-Butylbenzene	ND	5.7	µg/Kg	1	1/28/2005		
Tetrachloroethene	ND	5.7	µg/Kg	1	1/28/2005		
Toluene	ND	5.7	µg/Kg	1	1/28/2005		
trans-1,2-Dichloroethene	ND	5.7	µg/Kg	1	1/28/2005		
Trichloroethene	ND	5.7	µg/Kg	1	1/28/2005		
Trichlorofluoromethane	ND	5.7	µg/Kg	1	1/28/2005		
Vinyl chloride	ND	5.7	µg/Kg	1	1/28/2005		

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

EPA 8270C

RunID:	MS6_050127B	QC Batch:	21085	PrepDate:	1/27/2005	Analyst:	JWS
2-Methylnaphthalene	ND	3300	µg/Kg	10	1/28/2005		
Acenaphthene	ND	3300	µg/Kg	10	1/28/2005		
Acenaphthylene	ND	3300	µg/Kg	10	1/28/2005		
Anthracene	ND	3300	µg/Kg	10	1/28/2005		
Benzo(a)anthracene	ND	3300	µg/Kg	10	1/28/2005		
Benzo(a)pyrene	ND	3300	µg/Kg	10	1/28/2005		
Benzo(b)fluoranthene	ND	3300	µg/Kg	10	1/28/2005		
Benzo(g,h,i)perylene	ND	3300	µg/Kg	10	1/28/2005		
Benzo(k)fluoranthene	ND	3300	µg/Kg	10	1/28/2005		
Chrysene	ND	3300	µg/Kg	10	1/28/2005		
Dibenz(a,h)anthracene	ND	3300	µg/Kg	10	1/28/2005		

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank E - Value above quantitation range  
DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

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**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-003

**Client Sample ID:** T6-1-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	3300	µg/Kg	10	1/28/2005
Fluorene	ND	3300	µg/Kg	10	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	3300	µg/Kg	10	1/28/2005
Naphthalene	ND	3300	µg/Kg	10	1/28/2005
Phenanthrene	ND	3300	µg/Kg	10	1/28/2005
Pyrene	ND	3300	µg/Kg	10	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-004

**Client Sample ID:** T6-2-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID: ICP5_050128A	QC Batch: 21082	PrepDate: 1/27/2005	Analyst: RQ
Antimony	ND	1.0	mg/Kg
Arsenic	ND	1.0	mg/Kg
Barium	120	1.0	mg/Kg
Beryllium	ND	1.0	mg/Kg
Cadmium	ND	1.0	mg/Kg
Chromium	23	1.0	mg/Kg
Cobalt	11	1.0	mg/Kg
Copper	21	1.0	mg/Kg
Lead	5.7	1.0	mg/Kg
Molybdenum	ND	1.0	mg/Kg
Nickel	16	1.0	mg/Kg
Selenium	ND	1.0	mg/Kg
Silver	ND	1.0	mg/Kg
Thallium	ND	1.0	mg/Kg
Vanadium	39	1.0	mg/Kg
Zinc	46	1.0	mg/Kg

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID: GC8_050127A	QC Batch: 21081	PrepDate: 1/27/2005	Analyst: CBR
T/R Hydrocarbons: >C32	10	10	mg/Kg
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg
T/R Hydrocarbons: C16-C22	15	10	mg/Kg
T/R Hydrocarbons: C23-C32	22	10	mg/Kg

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID: GC2_050127A	QC Batch: E05VS025	PrepDate: 1/27/2005	Analyst: JV
GRO	ND	1.3	mg/Kg

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID: AA1_050128A	QC Batch: 21084	PrepDate: 1/27/2005	Analyst: JT
Mercury	ND	0.10	mg/Kg

**Qualifiers:** ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 DO - Surrogate Diluted Out H-Samples exceeding holding time

Results are wet unless otherwise specified

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# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-004

Client Sample ID: T6-2-2  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_050128A	QC Batch: R05VS021	PrepDate: 1/27/2005	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,1,1-Trichloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,1,2,2-Tetrachloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,1,2-Trichloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,1-Dichloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,1-Dichloroethene	ND	6.6	µg/Kg	1	1/28/2005
1,1-Dichloropropene	ND	6.6	µg/Kg	1	1/28/2005
1,2,3-Trichlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
1,2,3-Trichloropropane	ND	6.6	µg/Kg	1	1/28/2005
1,2,4-Trichlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
1,2,4-Trimethylbenzene	ND	6.6	µg/Kg	1	1/28/2005
1,2-Dibromo-3-chloropropane	ND	13	µg/Kg	1	1/28/2005
1,2-Dibromoethane	ND	6.6	µg/Kg	1	1/28/2005
1,2-Dichlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
1,2-Dichloroethane	ND	6.6	µg/Kg	1	1/28/2005
1,2-Dichloropropane	ND	6.6	µg/Kg	1	1/28/2005
1,3,5-Trimethylbenzene	ND	6.6	µg/Kg	1	1/28/2005
1,3-Dichlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
1,3-Dichloropropane	ND	6.6	µg/Kg	1	1/28/2005
1,4-Dichlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
2,2-Dichloropropane	ND	6.6	µg/Kg	1	1/28/2005
2-Chlorotoluene	ND	6.6	µg/Kg	1	1/28/2005
4-Chlorotoluene	ND	6.6	µg/Kg	1	1/28/2005
4-Isopropyltoluene	ND	6.6	µg/Kg	1	1/28/2005
Benzene	ND	6.6	µg/Kg	1	1/28/2005
Bromobenzene	ND	6.6	µg/Kg	1	1/28/2005
Bromodichloromethane	ND	6.6	µg/Kg	1	1/28/2005
Bromoform	ND	6.6	µg/Kg	1	1/28/2005
Bromomethane	ND	6.6	µg/Kg	1	1/28/2005
Carbon tetrachloride	ND	6.6	µg/Kg	1	1/28/2005
Chlorobenzene	ND	6.6	µg/Kg	1	1/28/2005
Chloroethane	ND	6.6	µg/Kg	1	1/28/2005
Chloroform	ND	6.6	µg/Kg	1	1/28/2005
Chloromethane	ND	6.6	µg/Kg	1	1/28/2005
cis-1,2-Dichloroethene	ND	6.6	µg/Kg	1	1/28/2005
cis-1,3-Dichloropropene	ND	6.6	µg/Kg	1	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
I - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-004

Client Sample ID: T6-2-2  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_050128A	QC Batch: R05VS021	PrepDate: 1/27/2005	Analyst: JPC		
Dibromochloromethane	ND	6.6	µg/Kg	1	1/28/2005
Dibromomethane	ND	6.6	µg/Kg	1	1/28/2005
Dichlorodifluoromethane	ND	6.6	µg/Kg	1	1/28/2005
Ethylbenzene	ND	6.6	µg/Kg	1	1/28/2005
Hexachlorobutadiene	ND	6.6	µg/Kg	1	1/28/2005
Isopropylbenzene	ND	6.6	µg/Kg	1	1/28/2005
m,p-Xylene	ND	6.6	µg/Kg	1	1/28/2005
Methylene chloride	ND	6.6	µg/Kg	1	1/28/2005
n-Butylbenzene	ND	6.6	µg/Kg	1	1/28/2005
n-Propylbenzene	ND	6.6	µg/Kg	1	1/28/2005
Naphthalene	ND	6.6	µg/Kg	1	1/28/2005
o-Xylene	ND	6.6	µg/Kg	1	1/28/2005
sec-Butylbenzene	ND	6.6	µg/Kg	1	1/28/2005
Styrene	ND	6.6	µg/Kg	1	1/28/2005
tert-Butylbenzene	ND	6.6	µg/Kg	1	1/28/2005
Tetrachloroethene	ND	6.6	µg/Kg	1	1/28/2005
Toluene	ND	6.6	µg/Kg	1	1/28/2005
trans-1,2-Dichloroethene	ND	6.6	µg/Kg	1	1/28/2005
Trichloroethene	ND	6.6	µg/Kg	1	1/28/2005
Trichlorofluoromethane	ND	6.6	µg/Kg	1	1/28/2005
Vinyl chloride	ND	6.6	µg/Kg	1	1/28/2005

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

### EPA 8270C

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
2-Methylnaphthalene	ND	330	µg/Kg	1	1/28/2005
Acenaphthene	ND	330	µg/Kg	1	1/28/2005
Acenaphthylene	ND	330	µg/Kg	1	1/28/2005
Anthracene	ND	330	µg/Kg	1	1/28/2005
Benzo(a)anthracene	ND	330	µg/Kg	1	1/28/2005
Benzo(a)pyrene	ND	330	µg/Kg	1	1/28/2005
Benzo(b)fluoranthene	ND	330	µg/Kg	1	1/28/2005
Benzo(g,h,i)perylene	ND	330	µg/Kg	1	1/28/2005
Benzo(k)fluoranthene	ND	330	µg/Kg	1	1/28/2005
Chrysene	ND	330	µg/Kg	1	1/28/2005
Dibenz(a,h)anthracene	ND	330	µg/Kg	1	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-004

**Client Sample ID:** T6-2-2  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)

**EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	330	µg/Kg	1	1/28/2005
Fluorene	ND	330	µg/Kg	1	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	330	µg/Kg	1	1/28/2005
Naphthalene	ND	330	µg/Kg	1	1/28/2005
Phenanthrene	ND	330	µg/Kg	1	1/28/2005
Pyrene	ND	330	µg/Kg	1	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



**Advanced Technology**  
**Laboratories**

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3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-005

**Client Sample ID:** T7-1-4  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**ICP METALS**

(EPA 3050B)

EPA 6010B

RunID: ICP5_050128A	QC Batch: 21082	PrepDate: 1/27/2005	Analyst: RQ		
Antimony	ND	1.0	mg/Kg	1	1/28/2005
Arsenic	ND	1.0	mg/Kg	1	1/28/2005
Barium	110	1.0	mg/Kg	1	1/28/2005
Beryllium	ND	1.0	mg/Kg	1	1/28/2005
Cadmium	ND	1.0	mg/Kg	1	1/28/2005
Chromium	16	1.0	mg/Kg	1	1/28/2005
Cobalt	7.8	1.0	mg/Kg	1	1/28/2005
Copper	16	1.0	mg/Kg	1	1/28/2005
Lead	17	1.0	mg/Kg	1	1/28/2005
Molybdenum	1.9	1.0	mg/Kg	1	1/28/2005
Nickel	12	1.0	mg/Kg	1	1/28/2005
Selenium	ND	1.0	mg/Kg	1	1/28/2005
Silver	ND	1.0	mg/Kg	1	1/28/2005
Thallium	ND	1.0	mg/Kg	1	1/28/2005
Vanadium	25	1.0	mg/Kg	1	1/28/2005
Zinc	59	1.0	mg/Kg	1	1/28/2005

**HYDROCARBON CHAIN IDENTIFICATION  
(LUFT)**

EPA 8015B

RunID: GC8_050127A	QC Batch: 21081	PrepDate: 1/27/2005	Analyst: CBR		
T/R Hydrocarbons: >C32	30	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C16-C22	13	10	mg/Kg	1	1/28/2005
T/R Hydrocarbons: C23-C32	47	10	mg/Kg	1	1/28/2005

**GASOLINE RANGE ORGANICS BY GC/FID**

EPA 8015B(M)

RunID: GC2_050128A	QC Batch: E05VS026	PrepDate: 1/27/2005	Analyst: JV		
GRO	ND	1.3	mg/Kg	1	1/28/2005

**MERCURY BY COLD VAPOR TECHNIQUE  
(EPA 7471)**

EPA 7471A

RunID: AA1_050128A	QC Batch: 21084	PrepDate: 1/27/2005	Analyst: JT		
Mercury	ND	0.10	mg/Kg	1	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified



Advanced Technology  
Laboratories

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3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-005

Client Sample ID: T7-1-4  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,1,1-Trichloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,1,2,2-Tetrachloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,1,2-Trichloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,1-Dichloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,1-Dichloroethene	ND	5.5	µg/Kg	1	1/27/2005
1,1-Dichloropropene	ND	5.5	µg/Kg	1	1/27/2005
1,2,3-Trichlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
1,2,3-Trichloropropane	ND	5.5	µg/Kg	1	1/27/2005
1,2,4-Trichlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
1,2,4-Trimethylbenzene	ND	5.5	µg/Kg	1	1/27/2005
1,2-Dibromo-3-chloropropane	ND	11	µg/Kg	1	1/27/2005
1,2-Dibromoethane	ND	5.5	µg/Kg	1	1/27/2005
1,2-Dichlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
1,2-Dichloroethane	ND	5.5	µg/Kg	1	1/27/2005
1,2-Dichloropropane	ND	5.5	µg/Kg	1	1/27/2005
1,3,5-Trimethylbenzene	ND	5.5	µg/Kg	1	1/27/2005
1,3-Dichlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
1,3-Dichloropropane	ND	5.5	µg/Kg	1	1/27/2005
1,4-Dichlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
2,2-Dichloropropane	ND	5.5	µg/Kg	1	1/27/2005
2-Chlorotoluene	ND	5.5	µg/Kg	1	1/27/2005
4-Chlorotoluene	ND	5.5	µg/Kg	1	1/27/2005
4-Isopropyltoluene	ND	5.5	µg/Kg	1	1/27/2005
Benzene	ND	5.5	µg/Kg	1	1/27/2005
Bromobenzene	ND	5.5	µg/Kg	1	1/27/2005
Bromodichloromethane	ND	5.5	µg/Kg	1	1/27/2005
Bromoform	ND	5.5	µg/Kg	1	1/27/2005
Bromomethane	ND	5.5	µg/Kg	1	1/27/2005
Carbon tetrachloride	ND	5.5	µg/Kg	1	1/27/2005
Chlorobenzene	ND	5.5	µg/Kg	1	1/27/2005
Chloroethane	ND	5.5	µg/Kg	1	1/27/2005
Chloroform	ND	5.5	µg/Kg	1	1/27/2005
Chloromethane	ND	5.5	µg/Kg	1	1/27/2005
cis-1,2-Dichloroethene	ND	5.5	µg/Kg	1	1/27/2005
cis-1,3-Dichloropropene	ND	5.5	µg/Kg	1	1/27/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantization limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantization range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-005

Client Sample ID: T7-1-4  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

### EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
Dibromochloromethane	ND	5.5	µg/Kg	1	1/27/2005
Dibromomethane	ND	5.5	µg/Kg	1	1/27/2005
Dichlorodifluoromethane	ND	5.5	µg/Kg	1	1/27/2005
Ethylbenzene	ND	5.5	µg/Kg	1	1/27/2005
Hexachlorobutadiene	ND	5.5	µg/Kg	1	1/27/2005
Isopropylbenzene	ND	5.5	µg/Kg	1	1/27/2005
m,p-Xylene	ND	5.5	µg/Kg	1	1/27/2005
Methylene chloride	ND	5.5	µg/Kg	1	1/27/2005
n-Butylbenzene	ND	5.5	µg/Kg	1	1/27/2005
n-Propylbenzene	ND	5.5	µg/Kg	1	1/27/2005
Naphthalene	ND	5.5	µg/Kg	1	1/27/2005
o-Xylene	ND	5.5	µg/Kg	1	1/27/2005
sec-Butylbenzene	ND	5.5	µg/Kg	1	1/27/2005
Styrene	ND	5.5	µg/Kg	1	1/27/2005
tert-Butylbenzene	ND	5.5	µg/Kg	1	1/27/2005
Tetrachloroethene	ND	5.5	µg/Kg	1	1/27/2005
Toluene	ND	5.5	µg/Kg	1	1/27/2005
trans-1,2-Dichloroethene	ND	5.5	µg/Kg	1	1/27/2005
Trichloroethene	ND	5.5	µg/Kg	1	1/27/2005
Trichlorofluoromethane	ND	5.5	µg/Kg	1	1/27/2005
Vinyl chloride	ND	5.5	µg/Kg	1	1/27/2005

## SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS (EPA 3550B)

### EPA 8270C

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
2-Methylnaphthalene	ND	1600	µg/Kg	5	1/28/2005
Acenaphthene	ND	1600	µg/Kg	5	1/28/2005
Acenaphthylene	ND	1600	µg/Kg	5	1/28/2005
Anthracene	ND	1600	µg/Kg	5	1/28/2005
Benzo(a)anthracene	ND	1600	µg/Kg	5	1/28/2005
Benzo(a)pyrene	ND	1600	µg/Kg	5	1/28/2005
Benzo(b)fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Benzo(g,h,i)perylene	ND	1600	µg/Kg	5	1/28/2005
Benzo(k)fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Chrysene	ND	1600	µg/Kg	5	1/28/2005
Dibenz(a,h)anthracene	ND	1600	µg/Kg	5	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-005

**Client Sample ID:** T7-1-4  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS**  
(EPA 3550B)**EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Fluorene	ND	1600	µg/Kg	5	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	1600	µg/Kg	5	1/28/2005
Naphthalene	ND	1600	µg/Kg	5	1/28/2005
Phenanthrene	ND	1600	µg/Kg	5	1/28/2005
Pyrene	ND	1600	µg/Kg	5	1/28/2005

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified

# Advanced Technology Laboratories

Date: 28-Jan-05

**CLIENT:** Ninyo & Moore  
**Lab Order:** 073856  
**Project:** Bloomfield II, 205372005  
**Lab ID:** 073856-006

**Client Sample ID:** T7-2-4  
**Collection Date:** 1/27/2005  
**Matrix:** SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## ICP METALS

(EPA 3050B)

EPA 6010B

RunID:	ICP5_050128A	QC Batch:	21082	PrepDate:	1/27/2005	Analyst:	RQ
Antimony	ND	1.0	mg/Kg	1	1/28/2005		
Arsenic	ND	1.0	mg/Kg	1	1/28/2005		
Barium	110	1.0	mg/Kg	1	1/28/2005		
Beryllium	ND	1.0	mg/Kg	1	1/28/2005		
Cadmium	ND	1.0	mg/Kg	1	1/28/2005		
Chromium	16	1.0	mg/Kg	1	1/28/2005		
Cobalt	8.4	1.0	mg/Kg	1	1/28/2005		
Copper	27	1.0	mg/Kg	1	1/28/2005		
Lead	20	1.0	mg/Kg	1	1/28/2005		
Molybdenum	1.6	1.0	mg/Kg	1	1/28/2005		
Nickel	14	1.0	mg/Kg	1	1/28/2005		
Selenium	ND	1.0	mg/Kg	1	1/28/2005		
Silver	ND	1.0	mg/Kg	1	1/28/2005		
Thallium	ND	1.0	mg/Kg	1	1/28/2005		
Vanadium	27	1.0	mg/Kg	1	1/28/2005		
Zinc	72	1.0	mg/Kg	1	1/28/2005		

## HYDROCARBON CHAIN IDENTIFICATION

(LUFT)

EPA 8015B

RunID:	GC8_050127A	QC Batch:	21081	PrepDate:	1/27/2005	Analyst:	CBR
T/R Hydrocarbons: >C32	15	10	mg/Kg	1	1/28/2005		
T/R Hydrocarbons: C10-C12	ND	10	mg/Kg	1	1/28/2005		
T/R Hydrocarbons: C13-C15	ND	10	mg/Kg	1	1/28/2005		
T/R Hydrocarbons: C16-C22	17	10	mg/Kg	1	1/28/2005		
T/R Hydrocarbons: C23-C32	34	10	mg/Kg	1	1/28/2005		

## GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B(M)

RunID:	GC2_050127A	QC Batch:	E05VS025	PrepDate:	1/27/2005	Analyst:	JV
GRO	3.2	0.95	mg/Kg	1	1/27/2005		

## MERCURY BY COLD VAPOR TECHNIQUE

(EPA 7471)

EPA 7471A

RunID:	AA1_050128A	QC Batch:	21084	PrepDate:	1/27/2005	Analyst:	JT
Mercury	ND	0.10	mg/Kg	1	1/28/2005		

**Qualifiers:** ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

DO - Surrogate Diluted Out

H-Samples exceeding holding time

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Results are wet unless otherwise specified



# Advanced Technology Laboratories

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-006

Client Sample ID: T7-2-4  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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## VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
1,1,1,2-Tetrachloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,1,1-Trichloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,1,2,2-Tetrachloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,1,2-Trichloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,1-Dichloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,1-Dichloroethene	ND	5.1	µg/Kg	1	1/27/2005
1,1-Dichloropropene	ND	5.1	µg/Kg	1	1/27/2005
1,2,3-Trichlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
1,2,3-Trichloropropane	ND	5.1	µg/Kg	1	1/27/2005
1,2,4-Trichlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
1,2,4-Trimethylbenzene	31	5.1	µg/Kg	1	1/27/2005
1,2-Dibromo-3-chloropropane	ND	10	µg/Kg	1	1/27/2005
1,2-Dibromoethane	ND	5.1	µg/Kg	1	1/27/2005
1,2-Dichlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
1,2-Dichloroethane	ND	5.1	µg/Kg	1	1/27/2005
1,2-Dichloropropane	ND	5.1	µg/Kg	1	1/27/2005
1,3,5-Trimethylbenzene	12	5.1	µg/Kg	1	1/27/2005
1,3-Dichlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
1,3-Dichloropropane	ND	5.1	µg/Kg	1	1/27/2005
1,4-Dichlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
2,2-Dichloropropane	ND	5.1	µg/Kg	1	1/27/2005
2-Chlorotoluene	ND	5.1	µg/Kg	1	1/27/2005
4-Chlorotoluene	ND	5.1	µg/Kg	1	1/27/2005
4-Isopropyltoluene	ND	5.1	µg/Kg	1	1/27/2005
Benzene	23	5.1	µg/Kg	1	1/27/2005
Bromobenzene	ND	5.1	µg/Kg	1	1/27/2005
Bromodichloromethane	ND	5.1	µg/Kg	1	1/27/2005
Bromoform	ND	5.1	µg/Kg	1	1/27/2005
Bromomethane	ND	5.1	µg/Kg	1	1/27/2005
Carbon tetrachloride	ND	5.1	µg/Kg	1	1/27/2005
Chlorobenzene	ND	5.1	µg/Kg	1	1/27/2005
Chloroethane	ND	5.1	µg/Kg	1	1/27/2005
Chloroform	ND	5.1	µg/Kg	1	1/27/2005
Chloromethane	ND	5.1	µg/Kg	1	1/27/2005
cis-1,2-Dichloroethene	ND	5.1	µg/Kg	1	1/27/2005
cis-1,3-Dichloropropane	ND	5.1	µg/Kg	1	1/27/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-006

Client Sample ID: T7-2-4  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**VOLATILE ORGANIC COMPOUNDS BY GC/MS****EPA 8260B**

RunID: MS3_050127A	QC Batch: R05VS020	PrepDate: 1/27/2005	Analyst: JPC		
Dibromochloromethane	ND	5.1	µg/Kg	1	1/27/2005
Dibromomethane	ND	5.1	µg/Kg	1	1/27/2005
Dichlorodifluoromethane	ND	5.1	µg/Kg	1	1/27/2005
Ethylbenzene	ND	5.1	µg/Kg	1	1/27/2005
Hexachlorobutadiene	ND	5.1	µg/Kg	1	1/27/2005
Isopropylbenzene	ND	5.1	µg/Kg	1	1/27/2005
m,p-Xylene	75	5.1	µg/Kg	1	1/27/2005
Methylene chloride	ND	5.1	µg/Kg	1	1/27/2005
n-Butylbenzene	ND	5.1	µg/Kg	1	1/27/2005
n-Propylbenzene	ND	5.1	µg/Kg	1	1/27/2005
Naphthalene	14	5.1	µg/Kg	1	1/27/2005
o-Xylene	25	5.1	µg/Kg	1	1/27/2005
sec-Butylbenzene	ND	5.1	µg/Kg	1	1/27/2005
Styrene	ND	5.1	µg/Kg	1	1/27/2005
tert-Butylbenzene	ND	5.1	µg/Kg	1	1/27/2005
Tetrachloroethene	ND	5.1	µg/Kg	1	1/27/2005
Toluene	16	5.1	µg/Kg	1	1/27/2005
trans-1,2-Dichloroethene	ND	5.1	µg/Kg	1	1/27/2005
Trichloroethene	ND	5.1	µg/Kg	1	1/27/2005
Trichlorofluoromethane	ND	5.1	µg/Kg	1	1/27/2005
Vinyl chloride	ND	5.1	µg/Kg	1	1/27/2005

**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS****(EPA 3550B)****EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
2-Methylnaphthalene	ND	1600	µg/Kg	5	1/28/2005
Acenaphthene	ND	1600	µg/Kg	5	1/28/2005
Acenaphthylene	ND	1600	µg/Kg	5	1/28/2005
Anthracene	ND	1600	µg/Kg	5	1/28/2005
Benzo(a)anthracene	ND	1600	µg/Kg	5	1/28/2005
Benzo(a)pyrene	ND	1600	µg/Kg	5	1/28/2005
Benzo(b)fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Benzo(g,h,i)perylene	ND	1600	µg/Kg	5	1/28/2005
Benzo(k)fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Chrysene	ND	1600	µg/Kg	5	1/28/2005
Dibenz(a,h)anthracene	ND	1600	µg/Kg	5	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H-Samples exceeding holding time

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Results are wet unless otherwise specified

**Advanced Technology Laboratories**

Date: 28-Jan-05

CLIENT: Ninyo & Moore  
Lab Order: 073856  
Project: Bloomfield II, 205372005  
Lab ID: 073856-006

Client Sample ID: T7-2-4  
Collection Date: 1/27/2005  
Matrix: SOIL

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
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**SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS  
(EPA 3550B)****EPA 8270C**

RunID: MS6_050127B	QC Batch: 21085	PrepDate: 1/27/2005	Analyst: JWS		
Fluoranthene	ND	1600	µg/Kg	5	1/28/2005
Fluorene	ND	1600	µg/Kg	5	1/28/2005
Indeno(1,2,3-cd)pyrene	ND	1600	µg/Kg	5	1/28/2005
Naphthalene	ND	1600	µg/Kg	5	1/28/2005
Phenanthrene	ND	1600	µg/Kg	5	1/28/2005
Pyrene	ND	1600	µg/Kg	5	1/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
B - Analyte detected in the associated Method Blank  
DO - Surrogate Diluted Out

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
E - Value above quantitation range  
H - Samples exceeding holding time

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Results are wet unless otherwise specified



CLIENT: Ninyo & Moore  
 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: MB-21082	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: ICP5_050128A
Client ID: ZZZZ	Batch ID: 21082	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 1/28/2005	SeqNo: 672252

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	2.0									
Arsenic	ND	1.0									
Barium	ND	1.0									
Beryllium	ND	1.0									
Cadmium	ND	1.0									
Chromium	ND	1.0									
Cobalt	ND	1.0									
Copper	ND	2.0									
Lead	ND	1.0									
Molybdenum	ND	1.0									
Nickel	ND	1.0									
Selenium	ND	1.0									
Silver	ND	1.0									
Thallium	ND	1.0									
Vanadium	ND	1.0									
Zinc	ND	1.0									

Sample ID: LCS-21082	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: ICP5_050128A						
Client ID: ZZZZZ	Batch ID: 21082	TestNo: EPA 6010B	(EPA 3050B)	Analysis Date: 1/28/2005	SeqNo: 672253						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	49.33	2.0	50	0	98.7	80	120	0	0		
Arsenic	49.48	1.0	50	0	99	80	120	0	0		
Barium	50.07	1.0	50	0	100	80	120	0	0		
Beryllium	49.33	1.0	50	0	98.7	80	120	0	0		
Cadmium	49.58	1.0	50	0	99.2	80	120	0	0		
Chromium	49.83	1.0	50	0	99.7	80	120	0	0		
Cobalt	50.18	1.0	50	0	100	80	120	0	0		
Copper	50.02	2.0	50	0	100	80	120	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

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3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Ninyo & Moore  
 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: LCS-21082	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: ICP5_050128A						
Client ID: ZZZZZ	Batch ID: 21082	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 1/28/2005	SeqNo: 672253						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	49.56	1.0	50	0	99.1	80	120	0	0		
Molybdenum	49.8	1.0	50	0	99.6	80	120	0	0		
Nickel	49.11	1.0	50	0	98.2	80	120	0	0		
Selenium	47.52	1.0	50	0	95	80	120	0	0		
Silver	50.79	1.0	50	0	102	80	120	0	0		
Thallium	49.92	1.0	50	0	99.8	80	120	0	0		
Vanadium	50.05	1.0	50	0	100	80	120	0	0		
Zinc	49.71	1.0	50	0	99.4	80	120	0	0		

Sample ID: 073856-006GMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: ICP5_050128A						
Client ID: T7-2-4	Batch ID: 21082	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 1/28/2005	SeqNo: 672260						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	77.21	1.0	125	0	61.8	23	118	0	0		
Arsenic	106.3	1.0	125	0	85	64	111	0	0		
Barium	213.2	1.0	125	113.9	79.4	36	146	0	0		
Beryllium	101.8	1.0	125	0	81.5	50	120	0	0		
Cadmium	100.9	1.0	125	0	80.7	62	107	0	0		
Chromium	118.4	1.0	125	16.37	81.6	63	119	0	0		
Cobalt	110.6	1.0	125	8.425	81.8	63	111	0	0		
Copper	129.8	1.0	125	27.44	81.9	58	136	0	0		
Lead	115.4	1.0	125	19.97	76.4	47	125	0	0		
Molybdenum	106.7	1.0	125	1.567	84.1	63	116	0	0		
Nickel	112.4	1.0	125	14.41	78.4	57	116	0	0		
Selenium	100.3	1.0	125	0	80.2	47	118	0	0		
Silver	104.7	1.0	125	0	83.8	48	125	0	0		
Thallium	91.68	1.0	125	0	73.3	49	116	0	0		
Vanadium	132.6	1.0	125	26.8	84.6	65	122	0	0		
Zinc	155.2	1.0	125	71.88	66.7	36	140	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 6010\_S

Sample ID: 073856-006GMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: ICP5_050128A						
Client ID: T7-2-4	Batch ID: 21082	TestNo: EPA 6010B (EPA 3050B)		Analysis Date: 1/28/2005	SeqNo: 672261						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	80.26	1.0	125	0	64.2	23	118	77.21	3.88	20	R
Arsenic	107.6	1.0	125	0	86.1	64	111	106.3	1.26	20	
Barium	290.9	1.0	125	113.9	142	36	146	213.2	30.8	20	
Beryllium	101.8	1.0	125	0	81.4	50	120	101.8	0.0264	20	
Cadmium	99.08	1.0	125	0	79.3	62	107	100.9	1.78	20	
Chromium	120.1	1.0	125	16.37	83	63	119	118.4	1.45	20	
Cobalt	109.5	1.0	125	8.425	80.8	63	111	110.6	1.06	20	
Copper	133.8	1.0	125	27.44	85.1	58	136	129.8	3.03	20	
Lead	114.9	1.0	125	19.97	75.9	47	125	115.4	0.478	20	
Molybdenum	106.9	1.0	125	1.567	84.3	63	116	106.7	0.193	20	
Nickel	113.1	1.0	125	14.41	78.9	57	116	112.4	0.652	20	
Selenium	101.3	1.0	125	0	81	47	118	100.3	0.984	20	
Silver	106.6	1.0	125	0	85.3	48	125	104.7	1.81	20	
Thallium	90.14	1.0	125	0	72.1	49	116	91.68	1.69	20	
Vanadium	136.2	1.0	125	26.8	87.6	65	122	132.6	2.73	20	
Zinc	157.9	1.0	125	71.88	68.8	36	140	155.2	1.74	20	

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time

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CLIENT: Ninyo & Moore  
 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 7471\_S

Sample ID: MB-21084	SampType: MBLK	TestCode: 7471_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: AA1_050128A
Client ID: ZZZZZ	Batch ID: 21084	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 1/28/2005	SeqNo: 672271
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND	0.10			

Sample ID: LCS-21084	SampType: LCS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: AA1_050128A
Client ID: ZZZZZ	Batch ID: 21084	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 1/28/2005	SeqNo: 672270
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	1.896	0.10	2.08	0	91.2 80 120 0 0

Sample ID: 073856-006GMS	SampType: MS	TestCode: 7471_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: AA1_050128A
Client ID: T7-2-4	Batch ID: 21084	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 1/28/2005	SeqNo: 672268
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.8399	0.10	0.83	0.04394	95.9 62 146 0 0

Sample ID: 073856-006GMSD	SampType: MSD	TestCode: 7471_S	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: AA1_050128A
Client ID: T7-2-4	Batch ID: 21084	TestNo: EPA 7471A (EPA 7471)		Analysis Date: 1/28/2005	SeqNo: 672269
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.804	0.10	0.83	0.04394	91.6 62 146 0.8399 4.37 30

Qualifiers: ND - Not Detected at the Reporting Limit  
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S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO- Surrogate dilute out  
 H - Sample exceeded holding time

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CLIENT: Ninyo & Moore  
 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_S\_G 5035P

Sample ID: E012705MB	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050127A						
Client ID: ZZZZ	Batch ID: E05VS025	TestNo: EPA 8015B(M)		Analysis Date: 1/27/2005	SeqNo: 672224						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	74.51	0	100	0	74.5	27	135	0	0		

Sample ID: E012805MB	SampType: MBLK	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050128A						
Client ID: ZZZZ	Batch ID: E05VS026	TestNo: EPA 8015B(M)		Analysis Date: 1/28/2005	SeqNo: 672283						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	ND	1.0									
Surr: Bromofluorobenzene (FID)	71.87	0	100	0	71.9	27	135	0	0		

Sample ID: E012705LC	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050127A						
Client ID: ZZZZ	Batch ID: E05VS025	TestNo: EPA 8015B(M)		Analysis Date: 1/27/2005	SeqNo: 672231						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.932	1.0	5	0	98.6	76	116	0	0		
Surr: Bromofluorobenzene (FID)	88.72	0	100	0	88.7	27	135	0	0		

Sample ID: E012805LC	SampType: LCS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050128A						
Client ID: ZZZZ	Batch ID: E05VS026	TestNo: EPA 8015B(M)		Analysis Date: 1/28/2005	SeqNo: 672338						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.099	1.0	5	0	102	76	116	0	0		
Surr: Bromofluorobenzene (FID)	85.38	0	100	0	85.4	27	135	0	0		

Sample ID: 073831-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050127A						
Client ID: ZZZZ	Batch ID: E05VS025	TestNo: EPA 8015B(M)		Analysis Date: 1/27/2005	SeqNo: 672226						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.758	1.0	5	0	95.2	27	137	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank  
 Calculations are based on raw values

DO - Surrogate dilute out  
 H - Sample exceeded holding time





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**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8015\_S\_G 5035P

Sample ID: 073831-001AMS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050127A						
Client ID: ZZZZZ	Batch ID: E05VS025	TestNo: EPA 8015B(M)		Analysis Date: 1/27/2005	SeqNo: 672226						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Bromofluorobenzene (FID)	88.99	0	100	0	89	27	135	0	0		

Sample ID: E012805MB-MS	SampType: MS	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050128A						
Client ID: ZZZZZ	Batch ID: E05VS026	TestNo: EPA 8015B(M)		Analysis Date: 1/28/2005	SeqNo: 672207						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	5.218	1.0	5	0	104	27	137	0	0		
Surr: Bromofluorobenzene (FID)	98.37	0	100	0	98.4	27	135	0	0		

Sample ID: 073831-001AMSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050127A						
Client ID: ZZZZZ	Batch ID: E05VS025	TestNo: EPA 8015B(M)		Analysis Date: 1/27/2005	SeqNo: 672227						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.762	1.0	5	0	95.2	27	137	4.758	0.0840	30	
Surr: Bromofluorobenzene (FID)	90.49	0	100	0	90.5	27	135	0	0	0	

Sample ID: E012805MB-MSD	SampType: MSD	TestCode: 8015_S_G 50	Units: mg/Kg	Prep Date:	Run ID: GC2_050128A						
Client ID: ZZZZZ	Batch ID: E05VS026	TestNo: EPA 8015B(M)		Analysis Date: 1/28/2005	SeqNo: 672302						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
GRO	4.83	1.0	5	0	96.6	27	137	5.218	7.72	30	
Surr: Bromofluorobenzene (FID)	85.45	0	100	0	85.5	27	135	0	0	0	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time



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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050127MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672069						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5.0									
1,1,1-Trichloroethane	ND	5.0									
1,1,2,2-Tetrachloroethane	ND	5.0									
1,1,2-Trichloroethane	ND	5.0									
1,1-Dichloroethane	ND	5.0									
1,1-Dichloroethene	ND	5.0									
1,1-Dichloropropene	ND	5.0									
1,2,3-Trichlorobenzene	ND	5.0									
1,2,3-Trichloropropane	ND	5.0									
1,2,4-Trichlorobenzene	ND	5.0									
1,2,4-Trimethylbenzene	ND	5.0									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,2-Dichloroethane	ND	5.0									
1,2-Dichloropropane	ND	5.0									
1,3,5-Trimethylbenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,3-Dichloropropane	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,2-Dichloropropane	ND	5.0									
2-Chlorotoluene	ND	5.0									
4-Chlorotoluene	ND	5.0									
4-Isopropyltoluene	ND	5.0									
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit  
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R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time



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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050127MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672069						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
Methylene chloride	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									
Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	48.78	5.0	50	0	97.6	61	164	0	0		
Surr: 4-Bromofluorobenzene	47.21	5.0	50	0	94.4	80	123	0	0		
Surr: Dibromofluoromethane	50.98	5.0	50	0	102	78	141	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time



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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050127MB1	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672069						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	49.03	5.0	50	0	98.1	86	123	0	0		

Sample ID: R050128MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672277						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1,2-Tetrachloroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloropropene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,2-Dibromo-3-chloropropane	ND	10
1,2-Dibromoethane	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
4-Isopropyltoluene	ND	5.0

Qualifiers: ND - Not Detected at the Reporting Limit  
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Calculations are based on raw values

DO - Surrogate dilute out  
H - Sample exceeded holding time



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3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050128MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672277						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	5.0									
Bromobenzene	ND	5.0									
Bromodichloromethane	ND	5.0									
Bromoform	ND	5.0									
Bromomethane	ND	5.0									
Carbon tetrachloride	ND	5.0									
Chlorobenzene	ND	5.0									
Chloroethane	ND	5.0									
Chloroform	ND	5.0									
Chloromethane	ND	5.0									
cis-1,2-Dichloroethene	ND	5.0									
cis-1,3-Dichloropropene	ND	5.0									
Dibromochloromethane	ND	5.0									
Dibromomethane	ND	5.0									
Dichlorodifluoromethane	ND	5.0									
Ethylbenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Isopropylbenzene	ND	5.0									
m,p-Xylene	ND	5.0									
Methylene chloride	ND	5.0									
n-Butylbenzene	ND	5.0									
n-Propylbenzene	ND	5.0									
Naphthalene	ND	5.0									
o-Xylene	ND	5.0									
sec-Butylbenzene	ND	5.0									
Styrene	ND	5.0									
tert-Butylbenzene	ND	5.0									
Tetrachloroethene	ND	5.0									
Toluene	ND	5.0									
trans-1,2-Dichloroethene	ND	5.0									

Qualifiers: ND - Not Detected at the Reporting Limit  
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 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050128MB2	SampType: MBLK	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672277						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichloroethene	ND	5.0									
Trichlorofluoromethane	ND	5.0									
Vinyl chloride	ND	5.0									
Surr: 1,2-Dichloroethane-d4	44.68	5.0	50	0	89.4	61	164	0	0		
Surr: 4-Bromofluorobenzene	47.44	5.0	50	0	94.9	80	123	0	0		
Surr: Dibromofluoromethane	47.97	5.0	50	0	95.9	78	141	0	0		
Surr: Toluene-d8	49.21	5.0	50	0	98.4	86	123	0	0		

Sample ID: R050127LC1	SampType: LCS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672065						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	88.26	5.0	100	0	88.3	63	127	0	0		
Benzene	94.64	5.0	100	0	94.6	88	126	0	0		
Chlorobenzene	98.03	5.0	100	0	98	91	133	0	0		
Toluene	94.19	5.0	100	0	94.2	87	126	0	0		
Trichloroethene	94.76	5.0	100	0	94.8	86	134	0	0		
Surr: 1,2-Dichloroethane-d4	48.42	5.0	50	0	92.6	61	164	0	0		
Surr: 4-Bromofluorobenzene	50.3	5.0	50	0	101	80	123	0	0		
Surr: Dibromofluoromethane	48.69	5.0	50	0	97.4	78	141	0	0		
Surr: Toluene-d8	50.69	5.0	50	0	101	86	123	0	0		

Sample ID: R050128LC1	SampType: LCS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	82.27	5.0	100	0	82.3	63	127	0	0		
Benzene	89.58	5.0	100	0	89.6	86	126	0	0		
Chlorobenzene	94.71	5.0	100	0	94.7	91	133	0	0		
Toluene	89.63	5.0	100	0	89.6	87	126	0	0		

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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8260\_S\_5035

Sample ID: R050128LC1	SampType: LCS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Trichloroethene	90.68	5.0	100	0	90.7	86	134	0	0		
Surr: 1,2-Dichloroethane-d4	45.43	5.0	50	0	90.9	61	164	0	0		
Surr: 4-Bromofluorobenzene	49.99	5.0	50	0	100	80	123	0	0		
Surr: Dibromofluoromethane	47.92	5.0	50	0	95.8	78	141	0	0		
Surr: Toluene-d8	49.97	5.0	50	0	99.9	86	123	0	0		

Sample ID: R050127MB1MS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672067						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	87.65	5.0	100	0	87.6	51	128	0	0		
Benzene	95.66	5.0	100	0	95.7	65	136	0	0		
Chlorobenzene	100.5	5.0	100	0	100	52	152	0	0		
Toluene	95.68	5.0	100	0	95.7	56	142	0	0		
Trichloroethene	96.16	5.0	100	0	96.2	54	155	0	0		
Surr: 1,2-Dichloroethane-d4	46.64	5.0	50	0	93.3	61	164	0	0		
Surr: 4-Bromofluorobenzene	50.21	5.0	50	0	100	80	123	0	0		
Surr: Dibromofluoromethane	48.5	5.0	50	0	97	78	141	0	0		
Surr: Toluene-d8	50.08	5.0	50	0	100	88	123	0	0		

Sample ID: R050128MB1MS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672275						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	90.1	5.0	100	0	90.1	51	128	0	0		
Benzene	101.7	5.0	100	0	102	65	136	0	0		
Chlorobenzene	104.4	5.0	100	0	104	52	152	0	0		
Toluene	101	5.0	100	0	101	56	142	0	0		
Trichloroethene	104.3	5.0	100	0	104	54	155	0	0		
Surr: 1,2-Dichloroethane-d4	42.65	5.0	50	0	85.3	61	164	0	0		

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H - Sample exceeded holding time

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**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

**ANALYTICAL QC SUMMARY REPORT****TestCode: 8260\_S\_5035**

Sample ID: R050128MB1MS	SampType: MS	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672275						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	49.84	5.0	50	0	99.7	80	123	0	0		
Surr: Dibromofluoromethane	46.33	5.0	50	0	92.7	78	141	0	0		
Surr: Toluene-d8	50.48	5.0	50	0	101	86	123	0	0		

Sample ID: R050127MB1MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050127A						
Client ID: ZZZZZ	Batch ID: R05VS020	TestNo: EPA 8260B		Analysis Date: 1/27/2005	SeqNo: 672068						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	99.16	5.0	100	0	99.2	51	128	87.65	12.3	30	
Benzene	106.2	5.0	100	0	106	65	136	95.66	10.5	30	
Chlorobenzene	114.2	5.0	100	0	114	52	152	100.5	12.8	30	
Toluene	105.8	5.0	100	0	106	56	142	95.68	10.1	30	
Trichloroethene	107.5	5.0	100	0	108	54	155	96.16	11.1	30	
Surr: 1,2-Dichloroethane-d4	46.2	5.0	50	0	92.4	61	164	0	0	30	
Surr: 4-Bromofluorobenzene	51.18	5.0	50	0	102	80	123	0	0	30	
Surr: Dibromofluoromethane	49	5.0	50	0	98	78	141	0	0	30	
Surr: Toluene-d8	49.63	5.0	50	0	99.3	86	123	0	0	30	

Sample ID: R050128MB1MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672276						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1-Dichloroethene	94.93	5.0	100	0	94.9	51	128	90.1	5.22	30	
Benzene	106.5	5.0	100	0	107	65	136	101.7	4.66	30	
Chlorobenzene	111.6	5.0	100	0	112	52	152	104.4	6.64	30	
Toluene	105.8	5.0	100	0	106	56	142	101	4.63	30	
Trichloroethene	109.6	5.0	100	0	110	54	155	104.3	5.01	30	
Surr: 1,2-Dichloroethane-d4	43.82	5.0	50	0	87.6	61	164	0	0	30	
Surr: 4-Bromofluorobenzene	49.7	5.0	50	0	99.4	80	123	0	0	30	
Surr: Dibromofluoromethane	46.56	5.0	50	0	93.1	78	141	0	0	30	

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 H - Sample exceeded holding time





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**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** 8260\_S\_5035

Sample ID: R050128MB1MSD	SampType: MSD	TestCode: 8260_S_5035	Units: µg/Kg	Prep Date:	Run ID: MS3_050128A						
Client ID: ZZZZ	Batch ID: R05VS021	TestNo: EPA 8260B		Analysis Date: 1/28/2005	SeqNo: 672276						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	50.3	5.0	50	0	101	86	123	0	0	30	

**Qualifiers:**  
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CLIENT: Ninyo & Moore  
Work Order: 073856  
Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: MB-21085	SampType: MBLK	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 1/27/2005	Run ID: MS6_050127B						
Client ID: ZZZZZ	Batch ID: 21085	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 1/27/2005	SeqNo: 672153						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	330									
Acenaphthene	ND	330									
Acenaphthylene	ND	330									
Anthracene	ND	330									
Benzo(a)anthracene	ND	330									
Benzo(a)pyrene	ND	330									
Benzo(b)fluoranthene	ND	330									
Benzo(g,h,i)perylene	ND	330									
Benzo(k)fluoranthene	ND	330									
Chrysene	ND	330									
Dibenz(a,h)anthracene	ND	330									
Fluoranthene	ND	330									
Fluorene	ND	330									
Indeno(1,2,3-cd)pyrene	ND	330									
Naphthalene	ND	330									
Phenanthrene	ND	330									
Pyrene	ND	330									
Surr: 1,2-Dichlorobenzene-d4	2821	0	3330	0	84.7	37	103	0	0		
Surr: 2-Fluorobiphenyl	3014	0	3330	0	90.5	37	113	0	0		
Surr: 4-Terphenyl-d14	3768	0	3330	0	113	46	123	0	0		
Surr: Nitrobenzene-d5	3222	0	3330	0	96.8	39	108	0	0		

Sample ID: LCS-21085	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 1/27/2005	Run ID: MS6_050127B						
Client ID: ZZZZZ	Batch ID: 21085	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 1/28/2005	SeqNo: 672154						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	2823	330	3330	0	84.8	64	95	0	0		
Pyrene	3159	330	3330	0	94.9	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2552	0	3330	0	76.6	37	103	0	0		
Surr: 2-Fluorobiphenyl	2789	0	3330	0	83.8	37	113	0	0		

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CLIENT: Ninyo & Moore  
 Work Order: 073856  
 Project: Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8270\_S\_FULL

Sample ID: LCS-21085	SampType: LCS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 1/27/2005	Run ID: MS6_050127B						
Client ID: ZZZZ	Batch ID: 21085	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 1/28/2005	SeqNo: 672154						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	3271	0	3330	0	98.2	46	123	0	0		
Surr: Nitrobenzene-d5	3020	0	3330	0	90.7	39	108	0	0		

Sample ID: 073856-004GMS	SampType: MS	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 1/27/2005	Run ID: MS6_050127B						
Client ID: T6-2-2	Batch ID: 21085	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 1/28/2005	SeqNo: 672155						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3156	330	3330	0	94.8	64	95	0	0		
Pyrene	3252	330	3330	0	97.7	63	100	0	0		
Surr: 1,2-Dichlorobenzene-d4	2778	0	3330	0	83.4	37	103	0	0		
Surr: 2-Fluorobiphenyl	3141	0	3330	0	94.3	37	113	0	0		
Surr: 4-Terphenyl-d14	3673	0	3330	0	110	46	123	0	0		
Surr: Nitrobenzene-d5	3333	0	3330	0	100	39	108	0	0		

Sample ID: 073856-004GMSD	SampType: MSD	TestCode: 8270_S_FUL	Units: µg/Kg	Prep Date: 1/27/2005	Run ID: MS6_050127B						
Client ID: T6-2-2	Batch ID: 21085	TestNo: EPA 8270C (EPA 3550B)		Analysis Date: 1/28/2005	SeqNo: 672156						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3037	330	3330	0	91.2	64	95	3156	3.84	30	
Pyrene	3169	330	3330	0	95.2	63	100	3252	2.59	30	
Surr: 1,2-Dichlorobenzene-d4	2671	0	3330	0	80.2	37	103	0	0	0	
Surr: 2-Fluorobiphenyl	3003	0	3330	0	90.2	37	113	0	0	0	
Surr: 4-Terphenyl-d14	3600	0	3330	0	108	46	123	0	0	0	
Surr: Nitrobenzene-d5	3203	0	3330	0	96.2	39	108	0	0	0	

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Date: 28-Jan-05

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**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

**TestCode:** HC\_S\_SVOA

Sample ID: MB-21081	SamplType: MBLK	TestCode: HC_S_SVOA	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B	(LUFT)	Analysis Date: 1/28/2005	SeqNo: 672164						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C10-C12	ND	10									
T/R Hydrocarbons: C13-C15	ND	10									
T/R Hydrocarbons: C16-C22	ND	10									
T/R Hydrocarbons: C23-C32	ND	10									
T/R Hydrocarbons: >C32	ND	10									

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO- Surrogate dilute out  
H - Sample exceeded holding time



# Advanced Technology Laboratories

Date: 28-Jan-05

Advanced Technology  
Laboratories

3275 Walnut Avenue

Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

**BatchID:** 21081

Sample ID: LCS-21081	SampType: LCS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672015						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	934.9	10	1000	0	93.5	73	125	0	0		
Surr: p-Terphenyl	86.66	0	80	0	108	60	129	0	0		

Sample ID: 073831-001AMS	SampType: MS	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672016						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	960.9	10	1000	9.41	95.1	70	128	0	0		
Surr: p-Terphenyl	88.12	0	80	0	110	60	129	0	0		

Sample ID: 073831-001AMSD	SampType: MSD	TestCode: 8015_S_DM	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672017						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	963.2	10	1000	9.41	95.4	70	128	960.9	0.245	30	
Surr: p-Terphenyl	87.19	0	80	0	109	60	129	0	0	30	

Sample ID: LCS-21081	SampType: LCS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672192						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	934.9	10	1000	0	93.5	73	125	0	0		
Surr: p-Terphenyl	86.66	0	80	0	108	60	129	0	0		

Sample ID: 073831-001AMS	SampType: MS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672193						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike/Surrogate outside limits due to matrix interference  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO - Surrogate diluted out  
H - Sample exceeded holding time



Advanced Technology  
Laboratories

3775 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore  
**Work Order:** 073856  
**Project:** Bloomfield II, 205372005

## ANALYTICAL QC SUMMARY REPORT

**BatchID:** 21081

Sample ID: 073831-001AMS	SamptType: MS	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC6_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672193						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	960.9	10	1000	9.41	95.1	70	128	0	0		
Surr: p-Terphenyl	88.12	0	80	0	110	60	129	0	0		

Sample ID: 073831-001AMSD	SamplType: MSD	TestCode: 8015_S_DSL	Units: mg/Kg	Prep Date: 1/27/2005	Run ID: GC8_050127A						
Client ID: ZZZZ	Batch ID: 21081	TestNo: EPA 8015B(M (LUFT)		Analysis Date: 1/28/2005	SeqNo: 672194						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	963.2	10	1000	9.41	95.4	70	128	960.9	0.245	30	
Surr: p-Terphenyl	87.19	0	80	0	109	60	129	0	0	0	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
R - RPD outside accepted recovery limits

S - Spike/Surrogate outside limits due to matrix interference  
B - Analyte detected in the associated Method Blank  
Calculations are based on raw values

DO - Surrogate diluted out  
H - Sample exceeded holding time



12600 Florence Avenue  
Santa Fe Springs, California

February 8, 2005  
Project No. 205372005

---

## **APPENDIX F**

### **DOCUMENTATION ASSOCIATED WITH THE HUMAN HEALTH SCREENING EVALUATION**



H'	2.00E-02 dimensionless	known
$\rho_b$	1.85 cm3/gm	assumed
$\theta_w$	0.1 dimensionless	assumed
$K_d$	18.37 gm/cm3	known
$\theta_a$	0.2 dimensionless	assumed
$K_{oc}$	1837 gm/cm3	calc
$f_{oc}$	0.01 dimensionless	assumed
$\omega$	0.15	assumed

Sample	$C_{wet}$ (mg/kg)	$C_1$ (mg/kg)	Depth (ft)	$C_{sg}$ (mg/l)	$C_{sg}$ (ug/m3)	Cancer	Non-cancer
POL2-25	3	3.53	25	3.83E-06	3.83E+00	6.20E-09	1.40E-04
T1-1	9.3	10.94	2	1.19E-05	1.19E+01	1.80E-07	4.20E-03
T5-1	17	20.00	9	2.17E-05	2.17E+01	9.30E-08	2.10E-03

SG-SCREEN  
A Version 2.0, 04

DTSC / HERD  
Version 2.0-mod4; 8/23/04  
Default for Unclassified Soil

Reset to  
Defaults

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)
91203	2.17E+01		
			Chemical Naphthalene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	274.32	24	SC		

MORE  
↓

ENTER Vadose zone SCS soil type  Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, $\rho_b^d$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^v$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^v$ ( $\text{cm}^3/\text{cm}^3$ )	ENTER Average vapor flow rate into bldg. (Leave blank to calculate)  $Q_{avg}$ (L/m)
SC	1.85	0.3	0.1	5

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

## CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, $H$ (atm-m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{Lb}$ (cal/mol)	Normal boiling point, $T_b$ (°K)	Critical temperature, $T_c$ (°K)	Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
5.90E-02	7.50E-06	4.82E-04	25	10,373	491.14	748.40	3.4E-05	3.0E-03	128.18

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^V$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_a$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{rg}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor- wall seam perimeter, $X_{crack}$ (cm)	Soil gas conc. ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
---	---	--	--	--	--	---	--	---

259.32	0.200	-0.093	1.78E-09	#NUM!	#NUM!	4,000	2.17E+01	3.39E+04
--------	-------	--------	----------	-------	-------	-------	----------	----------

Area of enclosed space below grade, $A_B$ (cm <sup>2</sup> )	Crack- to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_{eff}^v$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
--	--	--	---	--	--	--	---	---

1.00E+06	5.00E-03	15	12,768	4.48E-04	1.84E+02	1.80E-04	3.09E-03	259.32
----------	----------	----	--------	----------	----------	----------	----------	--------

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{bldg}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D^{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, $\exp(Pe')$ (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
--	---	---	--	--	--	---	---	---

15	2.17E+01	1.25	8.33E+01	3.09E-03	5.00E+03	2.87E+23	3.07E-04	6.67E-03
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Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
--	--

3.4E-05	3.0E-03
---------	---------

END

# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.3E-08	2.1E-03

MESSAGE SUMMARY BELOW:

END

## DATA ENTRY SHEET

SG-SCREEN

Version 2.0; 04

DTSC / HERD

Version 2.0-mod4; 8/23/04

Default for Unclassified Soil

Reset to  
Defaults

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
91203	1.19E+01			Naphthalene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_d$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	60.96	24	SC		

MORE  
↓

ENTER Vadose zone SCS soil type  Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, $\rho_b$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w$ ( $\text{cm}^3/\text{cm}^3$ )	ENTER Average vapor flow rate into bldg. (Leave blank to calculate)  $Q_{avg}$ (L/m)
SC	1.85	0.3	0.1	5

MORE  
↓

ENTER Averaging time for carcinogens, $AT_c$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{nc}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

## CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, H (atm-m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, $T_B$ (°K)	Critical temperature, $T_C$ (°K)	Unit risk factor, URF ( $\mu\text{g}/\text{m}^3\text{yr}^{-1}$ )	Reference conc., R/C (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
---	---	---	---	---	--	---	--	--	---------------------------------------

5.90E-02	7.50E-06	4.82E-04	25	10,373	491.14	748.40	3.4E-05	3.0E-03	128.18
----------	----------	----------	----	--------	--------	--------	---------	---------	--------

END

## INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^v$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_{fe}$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ar}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{seam}$ (cm)	Soil gas conc., ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
45.96	0.200	-0.093	1.78E-09	#NUM!	#NUM!	4,000	1.19E+01	3.39E+04

Area of enclosed space below grade, $A_g$ (cm <sup>2</sup> )	Crack-to-total area ratio, $\eta$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_v^e$ (cm <sup>2</sup> /s)	Diffusion path length, $L_d$ (cm)
1.00E+06	5.00E-03	15	12,768	4.48E-04	1.84E-02	1.80E-04	3.09E-03	45.96

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D_{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Péclet number, exp(Pe) (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	1.19E+01	1.25	8.33E+01	3.09E-03	5.00E+03	2.87E+23	1.10E-03	1.31E-02

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )
3.4E-05	3.0E-03
END	



# RESULTS SHEET

## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.8E-07	4.2E-03

MESSAGE SUMMARY BELOW:

END

SG-SCREEN

A Version 2.0; 04

DTSC / HERD

Version 2.0-mod4; 8/23/04

Default for Unclassified Soil

Reset to  
Defaults

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., $C_g$ ( $\mu\text{g}/\text{m}^3$ )	OR	ENTER Soil gas conc., $C_g$ (ppmv)	Chemical
91203	3.83E+00			Naphthalene

MORE  
↓

ENTER Depth below grade to bottom of enclosed space floor, $L_f$ (15 or 200 cm)	ENTER Soil gas sampling depth below grade, $L_s$ (cm)	ENTER Average soil temperature, $T_s$ ( $^{\circ}\text{C}$ )	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, $k_v$ ( $\text{cm}^2$ )
15	762	24	SC		

MORE  
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, $\rho_b$ ( $\text{g}/\text{cm}^3$ )	ENTER Vadose zone soil total porosity, $n^*$ (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w^*$ ( $\text{cm}^3/\text{cm}^3$ )	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) $Q_{\text{vib}}$ ( $\text{L}/\text{m}$ )
SC	1.85	0.3	0.1	5

MORE  
↓

ENTER Averaging time for carcinogens, $AT_C$ (yrs)	ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

## CHEMICAL PROPERTIES SHEET

Diffusivity in air, $D_a$ (cm <sup>2</sup> /s)	Diffusivity in water, $D_w$ (cm <sup>2</sup> /s)	Henry's law constant at reference temperature, $H$ (atm-m <sup>3</sup> /mol)	Henry's law constant reference temperature, $T_R$ (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, $T_B$ (°K)	Critical temperature, $T_C$ (°K)	Unit risk factor, URF ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Reference conc., RfC (mg/m <sup>3</sup> )	Molecular weight, MW (g/mol)
5.90E-02	7.50E-06	4.82E-04	25	10,373	491.14	748.40	3.4E-05	3.0E-03	128.18

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, $L_T$ (cm)	Vadose zone soil air-filled porosity, $\theta_a^V$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone effective total fluid saturation, $S_w$ (cm <sup>3</sup> /cm <sup>3</sup> )	Vadose zone soil intrinsic permeability, $k_i$ (cm <sup>2</sup> )	Vadose zone soil relative air permeability, $k_{ra}$ (cm <sup>2</sup> )	Vadose zone soil effective vapor permeability, $k_v$ (cm <sup>2</sup> )	Floor-wall seam perimeter, $X_{seam}$ (cm)	Soil gas conc. ( $\mu\text{g}/\text{m}^3$ )	Bldg. ventilation rate, $Q_{building}$ (cm <sup>3</sup> /s)
747	0.200	-0.093	1.78E-09	#NUM!	#NUM!	4.000	3.83E+00	3.39E+04

Area of enclosed space below grade, $A_E$ (cm <sup>2</sup> )	Crack-to-total area ratio, $r_1$ (unitless)	Crack depth below grade, $Z_{crack}$ (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-m <sup>3</sup> /mol)	Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless)	Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s)	Vadose zone effective diffusion coefficient, $D_v^{eff}$ (cm <sup>2</sup> /s)	Diffusion path length, $L_D$ (cm)
1.00E+08	5.00E-03	15	12.768	4.48E-04	1.84E-02	1.80E-04	3.09E-03	747

Convection path length, $L_p$ (cm)	Source vapor conc., $C_{source}$ ( $\mu\text{g}/\text{m}^3$ )	Crack radius, $r_{crack}$ (cm)	Average vapor flow rate into bldg., $Q_{soil}$ (cm <sup>3</sup> /s)	Crack effective diffusion coefficient, $D^{crack}$ (cm <sup>2</sup> /s)	Area of crack, $A_{crack}$ (cm <sup>2</sup> )	Exponent of equivalent foundation Peclet number, exp(Pe) (unitless)	Infinite source indoor attenuation coefficient, $\alpha$ (unitless)	Infinite source bldg. conc., $C_{building}$ ( $\mu\text{g}/\text{m}^3$ )
15	3.83E+00	1.25	8.33E+01	3.09E-03	5.00E+03	2.87E+23	1.16E-04	4.45E-04

Unit risk factor, URF ( $\mu\text{g}/\text{m}^3\text{-y}^{-1}$ )	Reference conc., R/C (mg/m <sup>3</sup> )
3.4E-05	3.0E-03

END

# RESULTS SHEET

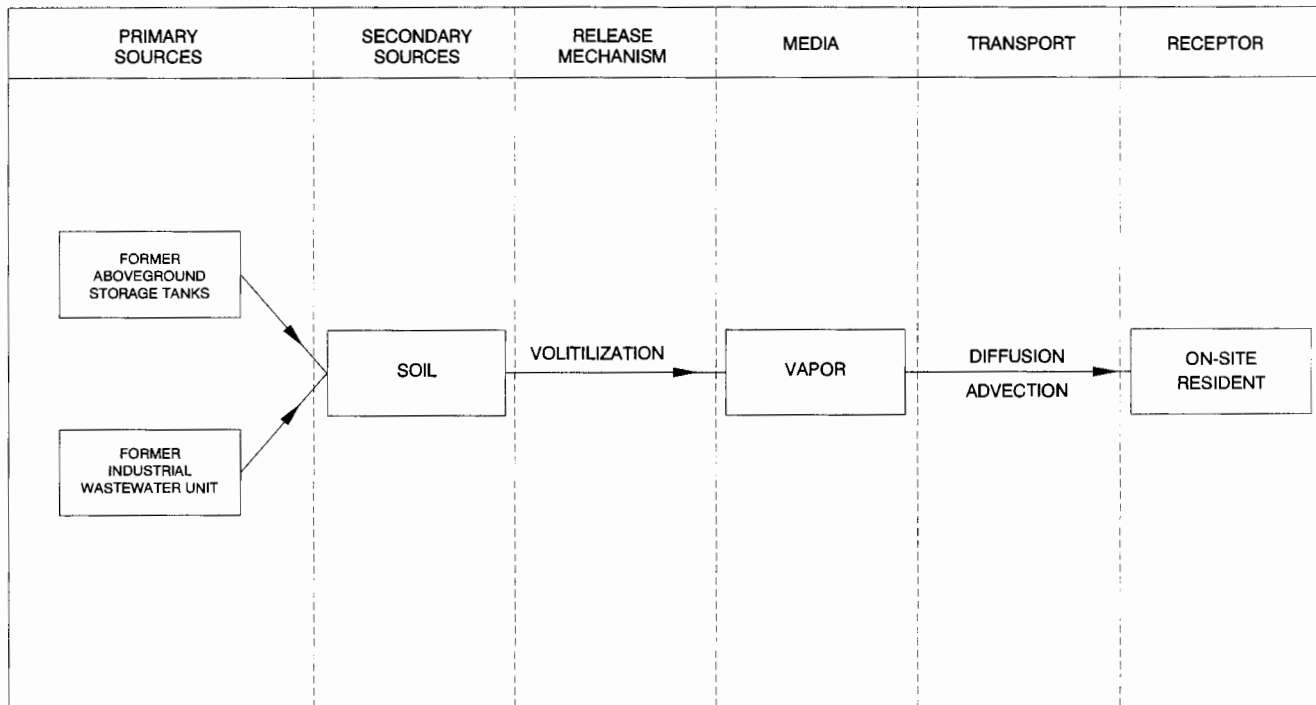
## INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
--	--

6.2E-09	1.4E-04
---------	---------

MESSAGE SUMMARY BELOW:

END



### CONCEPTUAL SITE MODEL

12600 FLORENCE AVENUE  
SANTA FE SPRINGS, CALIFORNIA

PROJECT NO.  
205372005

DATE  
2/2005

APPENDIX  
F